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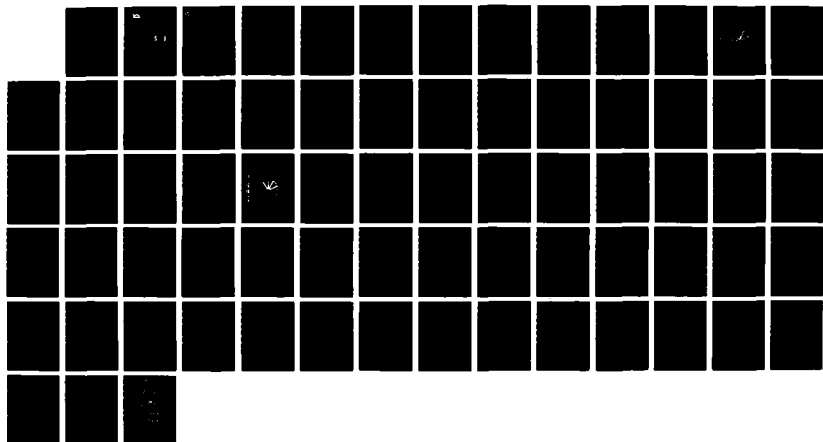
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AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB  
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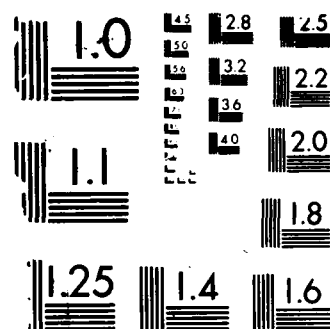
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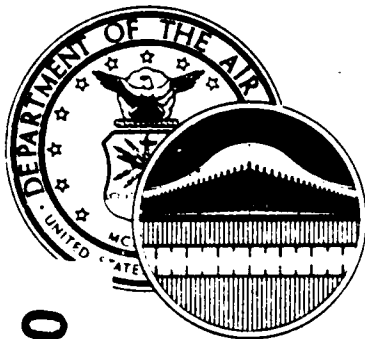
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UNITED STATES AIR FORCE

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# OCCUPATIONAL SURVEY REPORT

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FABRICATION AND PARACHUTE  
CAREER LADDER

AFSC 427X3

AFPT 90-427-769

AUGUST 1987

OCCUPATIONAL ANALYSIS PROGRAM  
USAF OCCUPATIONAL MEASUREMENT CENTER  
AIR TRAINING COMMAND  
RANDOLPH AFB, TEXAS 78150-5000

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DEPARTMENT OF THE AIR FORCE  
USAF OCCUPATIONAL MEASUREMENT CENTER (ATC)  
RANDOLPH AIR FORCE BASE, TX 78150

REPLY TO  
ATTN OF OMY

29 September 1987

SUBJECT Corrections for Occupational Survey Report for AFSC 427X3


TO HQ AFMPC/DPMRPQ1 HQ AFISC/DAP  
Army Occupational Survey Branch HQ USMC (Code TPI)  
CCAF/AYX NODAC  
Defense Technical Information Center 3507 ACS/DPKI

1. The recent copy of the Occupational Survey Report (OSR) for the Fabrica-  
tion and Parachute career ladder (AFSC 427X3) contained some misinformation  
due to an error in some of the computer products used in the analysis. The  
error has been identified and corrected. This involves a minor change in a  
portion of the Plan of Instruction (POI) analysis; the change does not affect  
the overall conclusions or implications.

2. Please make the following pen and ink changes to the AFSC 427X3 OSR:

<u>Page</u>	<u>Paragraph</u>	<u>Line</u>	<u>Action</u>
32	5	2	Change "I9C and IX3A" to "I4B and VIIIA."
45	1	1	Change "TAC and USAFE" to TAC, USAFE, and PACAF."

3. Thank you for your assistance. Questions may be directed to Lieutenant  
Jose Caussade at AUTOVON 487-6811.



JOSEPH S. TARTELL  
Chief, Occupational Analysis Program

DISTRIBUTION FOR  
AFSC 427X3 OSR AND SUPPORTING DOCUMENTS

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFHRL/MODS	2	1m	1m	1
AFHRL/ID	1	1m	1m/1h	1
AFLMC/LGM	1		1	
AFMPC/DPMRPQ1	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	1			
HQ AFISC/DAP	2			
HQ ATC/DPAE	1		1	
HQ ATC/TTOA	2		1	
HQ MAC/DPAT	3		3	
HQ MAC/TTGT	1		1	
HQ PACAF/TTGT	1		1	
HQ PACAF/DPAT	3		3	
HQ SAC/DPAT	3		3	
HQ SAC/TTGT	1		1	
HQ TAC/DPATJ	3		3	
HQ TAC/TTGT	1		1	
HQ USAF/LEYM	1		1	
HQ USAF/DPPT	1		1	
HQ USAFE/DPAT	3		3	
HQ USAFE/TTGT	1		1	
HQ USMC (CODE TPI)	1			
NODAC	1			
3330 TCHTW/TTGX (CHANUTE AFB IL)	5	2	8	2
3330 TCHTW/TTS (CHANUTE AFB IL)	1		1	
DET 2, USAFOMC (CHANUTE AFB IL)	1	1	1	1
USAFOMC/OMYXL	10	2m	5	10
388 TFW/MAT	2		2	
3507 ACS/DPKI	1			

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h = hard copy only

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## PREFACE

This Occupational Survey Report (OSR) presents the results of a detailed Air Force occupational survey of the Fabrication and Parachute (AFSC 427X3) career ladder. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products used in analysis for this report are available for use by operations and training officials.

The survey instrument for this project was developed by Mr Michael Fodale, Occupational Analyst. Mr Wayne J. Fruge provided computer support for the project. Second Lieutenant Jose E. Caussade, Occupational Analyst, analyzed the data and wrote the final report. Administrative support was provided by Ms Anita R. Carter. This report has been reviewed by Lieutenant Colonel Thomas E. Ulrich, Chief, Airman Analysis Branch, USAF Occupational Measurement Center, Randolph Air Force Base, Texas.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel (see distribution on page i). Additional copies are available upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph Air Force Base, Texas 78150-5000.

RONALD C. BAKER, Colonel, USAF  
Commander  
USAF Occupational Measurement  
Center

JOSEPH S. TARTELL  
Chief, Occupational Analysis Division  
USAF Occupational Measurement  
Center

## SUMMARY OF RESULTS

1. SURVEY COVERAGE: Survey results are based on responses from 863 AFSC 427X3 respondents. This represents 68 percent of the total assigned population and 85 percent of those eligible.
2. SPECIALTY STRUCTURE: The survey sample consisted primarily of a large job of general workers involved in a number of different duties. Several smaller jobs specializing primarily in one duty were also identified. As a whole, career ladder members were found doing a variety of functions. While there were several common core tasks performed by most members of the career ladder, several pockets of variations were found in which individuals performed functions specific to a major command.
3. CAREER LADDER PROGRESSION: AFSC 427X3 personnel follow an orderly skill level progression, moving from the more technically-oriented jobs into supervisory and administrative functions. Members at every skill level perform a very large job. Seven-skill level personnel, for example, though primarily performing management duties, also carry out a number of technical tasks.
4. TRAINING ANALYSIS: The Specialty Training Standard and Plan of Instruction were both very MAJCOM specific. Personnel responsible for career ladder training need to closely examine possibly taking MAJCOM-unique functions out of the 3-skill level course and having them trained directly by the major commands utilizing those functions.
5. JOB SATISFACTION: Job satisfaction indicators were only slightly higher than a sample of comparative AFSCs. Most respondents, however, felt their training prepared them well for their job and intended to reenlist. Job satisfaction indicators tended to increase with experience.
6. IMPLICATIONS: Career ladder progression was normal. Training documents are in need of review/revision. Job satisfaction information needs to be examined.



OCCUPATIONAL SURVEY REPORT  
FABRICATION AND PARACHUTE CAREER LADDER  
(AFSC 427X3)

INTRODUCTION

This occupational survey report addresses the Fabrication and Parachute career ladder (AFSC 427X3). The Training Development Services Division of the USAF Occupational Measurement Center (USAFOMC/OMT) requested this study to determine field training needs and to gather data for validating the Specialty Training Standard (STS). AFSC 427X3 was last surveyed in December 1980.

The present AFSC 427X3 career ladder emerged from the merger of the Parachute Rigger career ladder (AFSC 582X1) and Fabric and Rubber Products career ladder (AFSC 582X0) in April 1977. The Fabrication and Parachute career ladder's present duties include assembling, inspecting, cleaning, repairing, and packing parachute systems and flotation equipment. Additionally, they inspect, repair, and fabricate fabric items and perform shop repair of rubberized items.

Initial training for AFSC 427X3 personnel is given in a 12-week, 1-day course at Chanute AFB. This course, C3ABR42733, covers the techniques and functions of fabrication and parachute specialists. These include repairing flotation equipment and antiexposure suits, servicing parachute systems, and maintaining and operating sewing machines to fabricate and repair aircrew flight clothing, protective covers, and upholstery and aircraft soundproofing. Other topics taught include using technical orders, maintenance management, Air Force system of supply, shop and flightline safety, career progression, and blueprint interpretation. *Personnel Job Satisfaction*

SURVEY METHODOLOGY

Survey Development

Data for this survey were collected using USAF Job Inventory AFPT 90-427-769, dated September 1986. After reviewing pertinent career ladder publications and tasks from previous survey instruments, the inventory developer prepared a preliminary task list. This task list was refined and validated through personal interviews with 18 subject-matter experts at 4 different bases to ensure a comprehensive sample of the various Parachute and Fabrication career ladder functions. The locations selected for visits and the reasons for their selection are listed below:

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Chanute AFB IL--Technical Training Center. Responsible for C3ABR42733 course.

Holloman AFB NM--Representative of Tactical Air Command (TAC) functions.

Altus AFB OK--Representative of both Military Airlift Command (MAC) and Strategic Air Command (SAC) functions.

Dyess AFB TX--Representative of a Mobile Aerial Port Squadron (MAPS).

The final job inventory consisted of 1,250 tasks divided into 26 functional areas or duties. The inventory also contains a background section which includes questions on equipment use, grade, TAFMS, and job title.

#### Survey Administration

To complete the survey, each incumbent first answered the background questions, then marked the tasks he or she performed. Finally, the incumbent rated each task performed according to the relative time spent performing that task. Ratings range from 1 (a very small amount of time spent) to 9 (a very large amount of time spent). As part of the computer analysis, all of an incumbent's ratings are combined and the total is assumed to represent 100 percent of the individual's time on the job. Each rating is then divided by this total and multiplied by 100 to give the relative percent time spent for each task. Using these figures, analysis compares tasks in terms of the relative percent time spent performing them.

Upon receipt of the inventory booklets from USAFOMC, survey control officers at Consolidated Base Personnel Offices worldwide distributed the inventory to all eligible AFSC 427X3 personnel. A total of 1,018 incumbents was selected from a computer-generated list obtained from the Air Force Human Resources Laboratory (AFHRL). Excluded from this list were personnel in training, hospital, or PCS status. Table 1. reflects the distribution by MAJCOM, as of September 1986, of respondents in the survey sample. The 863 respondents in the final sample represent 68 percent of the total assigned AFSC 427X3 personnel and 85 percent of those eligible.

#### Task Factor Administration

In addition to collecting task performance data, part of the survey administration process involves collecting task factor ratings of task difficulty (TD) and training emphasis (TE). These ratings are collected only from senior NCOs randomly selected to represent their career ladder, and are processed separately from task performance data.

TABLE 1  
COMMAND DISTRIBUTION OF SURVEY SAMPLE

<u>COMMAND</u>	<u>% OF ASSIGNED (N=1,260)</u>	<u>% OF SAMPLE (N=863)</u>
MAC	31%	33%
TAC	24%	24%
SAC	17%	19%
ATC	9%	6%
USAFE	7%	7%
PACAF	6%	6%
OTHER	6%	5%

Total Assigned: 1,260  
Total Eligible\*: 1,018  
Total in Sample: 863  
Percent of Assigned in Sample: 68%  
Percent Eligible in Sample: 85%

\* Excludes those in training, hospital, or PCS status

Task difficulty refers to the length of time required for the average job incumbent to learn to do a task. To complete the task difficulty booklet, each senior NCO rated inventory tasks with which they were familiar on a 9-point scale, ranging from extremely low relative difficulty (a rating of 1) to extremely high relative difficulty (a rating of 9). The interrater reliability of the TD data provided by 27 AFSC 427X3 NCOs was .90. These TD ratings were adjusted to give a rating of 5.00 to a task of average difficulty, with a standard deviation of 1.00. The TD ratings provide a rank-ordered listing of the tasks in the inventory by degree of difficulty.

Training emphasis refers to the importance of structured training (through resident technical schools, field training detachments, formal OJT, etc.) of particular tasks for first-enlistment personnel. Individuals completing TE booklets rated tasks on a 10-point scale, ranging from a blank (no training emphasis) to 9 (extremely heavy training required). The TE ratings provide a rank-ordered listing of tasks from high to low training emphasis. The interrater reliability for the 34 NCOs who completed TE booklets was .92. The average TE rating was 2.07, with a standard deviation of 1.57. Tasks rated above 3.64 are considered high in training emphasis for AFSC 427X3 first-enlistment personnel.

When used in conjunction with other information, such as percent members performing, TD and TE ratings can provide insight into training requirements. Such insight may help validate lengthening or shortening portions of instruction supporting AFSC-needed knowledges or skills.

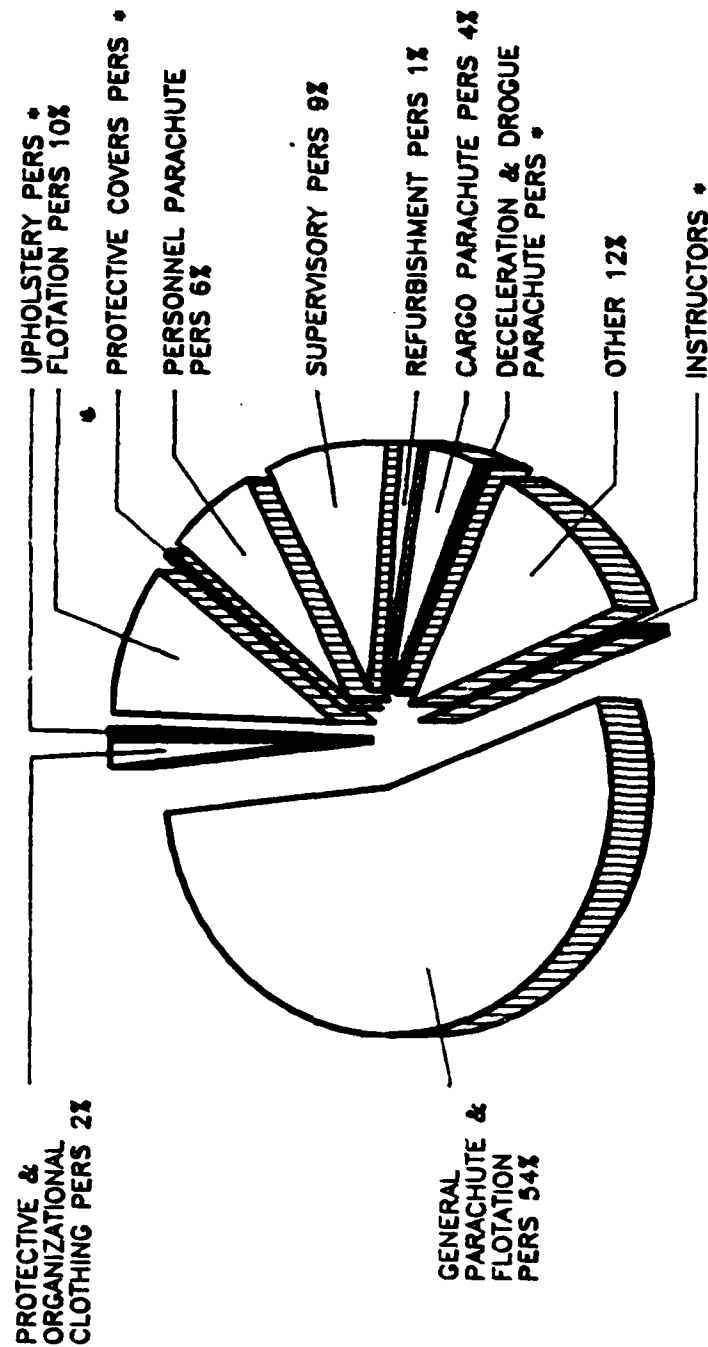
### SPECIALTY JOBS (Career Ladder Structure)

An important function of the USAF Occupational Analysis Program is examining a career ladder's structure. Based on incumbent responses to the survey, analysis identifies groups of incumbents spending similar amounts of time performing similar tasks. Individuals performing many of the same tasks and spending similar amounts of time on those tasks group together to describe a job performed in the career ladder. In this way, analysis identifies the basic structure of the career ladder, in terms of the jobs performed, and their relationship to each other. This analysis provides a foundation for evaluating other aspects of the career ladder, such as personnel classification, AFR 39-1 Specialty Descriptions, and training considerations.

#### Specialty Structure Overview

Analysis of the jobs in the AFSC 427X3 career ladder identified most career ladder members performing a wide range of duties primarily dealing with personnel parachutes and flotation equipment. Several other groups, however, performed functions which concentrated in one specific duty. The following outline, which is illustrated in Figure 1, gives a more specific description

# AFSC 427X3 SPECIALTY JOBS



\* LESS THAN 1 PERCENT

Figure 1

of the AFSC 427X3 career ladder. The group (GRP) number refers to computer-printed information; the number of personnel in the group is represented by the letter N.

- I. GENERAL PARACHUTE AND FLOTATION PERSONNEL (GRP073, N=467)
- II. PROTECTIVE AND ORGANIZATIONAL CLOTHING PERSONNEL (GRP167, N=15)
- III. UPHOLSTERY PERSONNEL (GRP176, N=5)
- IV. FLOTATION PERSONNEL (GRP064, N=84)
- V. PERSONNEL PARACHUTE PERSONNEL (GRP054, N=56)
- VI. DECELERATION AND DROGUE PARACHUTE PERSONNEL (GRP145, N=5)
- VII. SUPERVISORY PERSONNEL (GRP049, N=76)
- VIII. PROTECTIVE COVERS PERSONNEL (GRP144, N=5)
- IX. REFURBISHMENT PERSONNEL (GRP113, N=12)
- X. INSTRUCTORS (GRP065, N=5)
- XI. CARGO PARACHUTE PERSONNEL (GRP117, N=32)

Eighty-eight percent of the survey respondents grouped into the above jobs. The remaining 12 percent did not perform functions similar enough to group together or performed so few tasks in the inventory their job could not be described. An example of a job much different from anyone else in the career ladder is that of the Technical Order Distribution Office (TODO) Monitor.

#### Group Descriptions

The following paragraphs briefly describe the different jobs identified in the analysis. Table 2 provides selective background data on these groups. For a more detailed listing of representative tasks and a summary of background data on these groups and the jobs within these groups, see Appendix A.

I. GENERAL PARACHUTE AND FLOTATION PERSONNEL (GRP073). The 467 airmen in this group account for the single largest job in the career ladder. This job, which accounts for 54 percent of the total career ladder structure, is primarily a generalist job where individuals work in many different areas. While most of their duty time is spent servicing personnel parachute systems

TABLE 2  
SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	GENERAL PARACHUTE AND FLOTATION		PROTECTIVE AND ORGANIZATIONAL CLOTHING		UPHOLSTERY PERSONNEL		FLOTATION PERSONNEL		PERSONNEL PARACHUTE PERSONNEL	
	PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL		PERSONNEL	
NUMBER IN GROUP	467		15		5		84		56	
PERCENT OF SAMPLE	54%		2%		*		10%		6%	
AVERAGE NUMBER OF TASKS	291		158		184		96		149	
-----										
MAJCOM (PERCENT):**										
AFE	9%		47%		0%		5%		0%	
ATC	2%		0%		0%		5%		36%	
MAC	26%		0%		100%		48%		18%	
PAF	7%		0%		0%		8%		5%	
SAC	25%		0%		0%		5%		25%	
TAC	26%		53%		0%		25%		13%	
-----										
DAFSC (PERCENT):										
42733	9%		27%		0%		32%		29%	
42753	72%		53%		60%		63%		64%	
42773	19%		20%		40%		5%		7%	
-----										
AVERAGE T1CF (MOS)	69		42		118		36		43	
AVERAGE TAFMS (MOS)	75		48		120		39		46	
PERCENT FIRST ENLISTMENT	49%		60%		0%		76%		77%	

\* Less than 1 percent

\*\* Only predominant MAJCOMs displayed

TABLE 2 (CONTINUED)

## SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

NUMBER IN GROUP PERCENT OF SAMPLE AVERAGE NUMBER OF TASKS	DECELERATION AND DROGUE PARACHUTE PERSONNEL	SUPERVISORY PERSONNEL	PROTECTIVE COVERS PERSONNEL	REFURBISHMENT PERSONNEL	INSTRUCTORS	CARGO PARACHUTE PERSONNEL
	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL
5	5	76	5	12	5	32
*	*	9%	*	1%	*	4%
94	94	155	75	117	30	69
MAJCOM (PERCENT):**						
AFE	40%	5%	0%	0%	0%	3%
ATC	0%	5%	0%	8%	80%	0%
MAC	0%	36%	0%	92%	0%	97%
PAF	0%	9%	0%	0%	0%	0%
SAC	0%	20%	0%	0%	0%	0%
TAC	60%	20%	100%	0%	0%	0%
DAFSC (PERCENT):						
42733	20%	0%	20%	0%	0%	9%
42753	60%	17%	60%	75%	80%	81%
42773	20%	83%	20%	25%	20%	9%
AVERAGE T1CF (MOS)						
42	42	176	81	63	114	46
AVERAGE TAFMS (MOS)						
46	46	188	85	64	116	49
PERCENT FIRST ENLISTMENT						
60%	60%	4%	40%	58%	0%	75%

\* Less than 1 percent

\*\* Only predominant MAJCOMs displayed



(14 percent), large amounts of time are also spent servicing life rafts and life preservers (12 percent and 11 percent, respectively). As would be expected, personnel in this job have a very broad job, averaging 291 tasks. Representative tasks include:

- pack life preservers
- inflate life rafts
- pack personnel parachutes
- inflate life preservers
- cut stencils
- sew items, such as name tags, unit patches, or  
velcro tape onto organizational clothing

These personnel average over 6 years TAFMS, with 72 percent 5-skill level qualified. A number of job variations were found within this job in which individuals are concentrating on specific aspects of the job. These include individuals dealing with personnel parachutes, flotation equipment, first-line supervision, escape slides, thermal curtains, deceleration parachutes, and drogue parachutes.

The remaining jobs identified consist of individuals performing more specific jobs. Unlike the above mentioned job, these jobs are smaller in scope and encompass fewer different functions.

II. PROTECTIVE AND ORGANIZATIONAL CLOTHING PERSONNEL (GRP167). These 15 airmen account for almost 2 percent of the total sample. Personnel in this job primarily perform maintenance on organizational and protective clothing, performing functions such as sewing and inspecting. These individuals also work on life preservers, but work little on life rafts. This is in contrast to most other job groups identified, which usually deal equally with both types of flotation equipment. This discrepancy is because these individuals primarily work at F-111 bases. These aircraft do not have flotation systems maintained by AFSC 427X3 personnel. Servicing protective and organizational clothing accounts for 20 percent of their time, while servicing life preservers takes up 19 percent of their total job time. An average of 158 tasks are performed on this job, some of which include:

- sew items, such as name tags, unit patches, or  
velcro tape onto organizational clothing
- pack life preservers
- sew organizational clothing
- inspect life preservers
- sew items, such as name tags, unit patches, or  
velcro tape onto protective clothing
- inflate life preservers
- lubricate zippers on antiexposure suits

Personnel in this job average just over 4 years TAFMS. Fifty-three percent are qualified at the 5-skill level with the remainder qualified at the 3-skill level (27 percent) and at the 7-skill level (20 percent).

III. UPHOLSTERY PERSONNEL (GRP176). The five individuals in this job make up less than 1 percent of the total sample. They perform a unique job, primarily working on aircraft upholstery. Three of the five are assigned at Andrews AFB and work on aircraft used in carrying dignitaries. As such, this job consists of inspecting, manufacturing, and repairing aircraft soundproofing and upholstery, which accounts for 17 percent of their total job time. Personnel in this job are some of the most senior in the sample, averaging 10 years TAFMS. Sixty percent are qualified at the 5-skill level, while the remainder are 7-skill level personnel. These job members are exclusively utilized by the Military Airlift Command (MAC). They perform an average of 184 tasks. Representative of these tasks include:

- manufacture aircraft covers, such as seat, headrest,  
or armrest covers
- replace aircraft carpeting
- replace aircraft covers, such as seat, headrest, or  
armrest covers
- cut fabric for aircraft fabric items
- inspect aircraft fabric items
- cut foam rubber for aircraft seat cushions

IV. FLOTATION PERSONNEL (GRP064). This job consists of 84 members and accounts for 10 percent of the total job sample. As the job title implies, these personnel predominantly work on flotation equipment, such as life preservers and life rafts. These two functions account for 30 and 25 percent of their total job time, respectively. Personnel in this job perform an average of 96 tasks, some of which include:

- pack life preservers
- inspect life preservers
- inflate life preservers
- perform leakage inspection of life preservers
- inflate life rafts
- determine corrected pressures for life rafts

This job primarily consists of junior people with an average TAFMS of a little over 3 years. Seventy-six percent of these airmen are in their first enlistment. Sixty-two percent are qualified at the 5-skill level, while 32 percent are at the 3-skill level and 5 percent at the 7-skill level. MAC makes up the largest utilizing command with 48 percent. This job contains several subgroups of individuals who, while still principally dealing with flotation equipment, show an increased emphasis in other functions. These subgroups consist of individuals working with personnel parachutes, deceleration parachutes, or with life preservers much more than life rafts.

V. PERSONNEL PARACHUTE PERSONNEL (GRP054). Fifty-six airmen make up this job, accounting for 6 percent of the total sample. Personnel in this job are responsible for servicing personnel parachute systems, which accounts for 41 percent of their total job time. These personnel perform an average of 149 tasks, which include:

- pack personnel parachutes
- inspect personnel parachutes
- inspect personnel parachute system automatic  
  ripcord releases
- perform functional tests of personnel parachute  
  system canopy releases
- determine repairability of damaged personnel  
  parachute
- assemble personnel parachute systems

Like the aforementioned group, this job also consists of junior people whose average TAFMS is just under 4 years. Most are qualified at the 5-skill level (64 percent), with 29 percent qualified at the 3-skill level and 7 percent at the 7-skill level. Within this job, there are several pockets of variations where individuals are performing duties in addition to their overall job of servicing personnel parachute systems. These include personnel working on deceleration parachutes and personnel recovery systems, such as the ACES II and the MK/H-7.

VI. DECELERATION AND DROGUE PARACHUTE PERSONNEL (GRP145). The five airmen in this job account for less than 1 percent of the total sample. Their major job consists of servicing deceleration and drogue parachute systems. While some functions are performed on personnel parachute systems, the majority of their job time is spent servicing deceleration parachutes (26 percent) and drogue parachutes (13 percent). They perform an average of 94 tasks. Some representative tasks include:

- inspect deceleration parachutes
- pack deceleration parachutes
- assemble deceleration parachute systems
- inspect drogue parachutes
- replace deceleration parachute system pilot chutes
- assemble drogue parachute systems

This is another junior group of individuals with an average TAFMS of just under 4 years. Sixty percent are qualified at the 5-skill level, and 20 percent are qualified at the 3-skill level and at the 7-skill level.

VII. SUPERVISORY PERSONNEL (GRP049). The 76 personnel in this job account for 9 percent of the total sample. These are the NCOICs and shop chiefs of the career ladder whose major duties are supervisory and administrative in nature. Seventy-one percent of their total job time is spent performing these supervisory and administrative functions. Personnel in this group perform an average of 155 tasks. Representative tasks include:

- write APR
- inspect completed work
- counsel subordinates on military-related problems
- inspect personnel
- establish work priorities
- supervise Fabrication and Parachute Specialists (AFSC 42753)

As would be expected, these are the most senior individuals in the sample, averaging almost 16 years TAFMS. The majority of these individuals are qualified at the 7-skill level (66 percent), with 22 percent being qualified at the 3-skill level and 12 percent at the 5-skill level. A group of individuals within this job is associated with cargo parachutes supervising in Aerial Port (APS) and Mobile Aerial Port (MAPS) squadrons.

VIII. PROTECTIVE COVERS PERSONNEL (GRP144). The five members of this job account for less than 1 percent of the total sample. These individuals are involved in the repair and maintenance of protective covers and tarps, often for mobility purposes. Servicing protective covers accounts for 19 percent of their total job time. This was the only job identified which dealt, to any great extent, with maintaining mobile equipment and facilities, accounting for 7 percent of their total job time. The majority work at Holloman AFB in a job dealing with maintaining facilities used during deployments. All members are utilized by Tactical Air Command (TAC). Personnel in this job perform an average of 75 tasks, which include:

- fabricate protective covers for other than targets
- sew tarps
- manufacture tarps
- lay out protective cover patterns for other than targets
- replace damaged fabric on mobile site equipment, such as portable showers or folding chairs
- sew seams on vehicle covers

Personnel in this job have an average TAFMS of 7 years, with 60 percent being qualified at the 5-skill level and 20 percent qualified at the 3-skill level and the 7-skill level.

IX. REFURBISHMENT PERSONNEL (GRP113). This job consists of 12 members, making up 1 percent of the total sample. Like the Upholstery Personnel job identified above, this job deals with inspecting, manufacturing, and repairing aircraft soundproofing and upholstery. This duty accounts for 28 percent of their total job time. Unlike the Upholstery Personnel job, this job deals with aircraft used, for example, to transport troops. Job members also manufacture, repair, and modify aircraft fabric items, accounting for 22 percent of their total job time. The majority of these job members are stationed at Travis AFB, with 92 percent being utilized by MAC. They perform an average of 117 tasks. Representative tasks include:

- replace aircraft linoleum
- sew aircraft insulation
- fabricate aircraft blanket insulation
- cut fabric for aircraft fabric items
- replace aircraft blow out patches
- cut insulating material for aircraft soundproofing

These personnel average 5 years TAFMS. Most are qualified at the 5-skill level (75 percent), with the remainder qualified at the 7-skill level (25 percent).

X. INSTRUCTORS (GRP065). The five individuals in this job account for less than 1 percent of the total sample. As the name implies, these individuals have the primary responsibility of training personnel in the duties of the AFSC 427X3 career ladder. Additionally, they spend large amounts of time maintaining shop facilities and equipment. Their training functions account for 17 percent of their total job time, while shop equipment maintenance accounts for 40 percent of their time. They have a narrow job, averaging 30 tasks, which include:

- adjust sewing machines
- perform operator maintenance on sewing machines,  
such as changing needles, lamps, or pressure feet
- time sewing machines
- administer tests
- score tests such as oral, written, or performance tests
- certify proficiency of subordinates

These are primarily senior personnel, averaging almost 10 years TAFMS. Eighty percent are qualified at the 5-skill level and 20 percent at the 7-skill level.

XI. CARGO PARACHUTE PERSONNEL (GRP117). This job consists of 32 airmen and accounts for 4 percent of the total sample. These individuals work at APS and MAPS squadrons performing tasks related to servicing cargo type parachute systems. Servicing these systems accounts for 51 percent of their total job time. Ninety-seven percent of these individuals are utilized by MAC. Personnel perform an average of 69 tasks which include:

- inspect cargo type parachutes
- pack cargo parachutes
- determine repairability of damaged cargo type parachutes
- patch cargo parachute system canopies
- assemble cargo parachute systems
- manufacture cargo parachute system expanded air drop training bundles

These personnel average just over 4 years TAFMS. Eighty-one percent are qualified at the 5-skill level, while 10 percent are qualified at the 3-skill level and 9 percent at the 7-skill level.

#### Comparison of Specialty Jobs

Most career ladder personnel grouped into a generalist job consisting of individuals working in a variety of different duties. Individuals in this job share a common core set of tasks dealing primarily with flotation equipment. Beyond these common tasks, job members are likely to be involved in a number of different job variations. Even with these different variations, all these job members perform a very large job requiring knowledge in several different duties.

The other jobs identified were smaller and more specialized. Individuals in these jobs concentrated primarily in one duty, working in other duties to a much smaller extent. As such, these jobs were much narrower in scope, averaging over 150 less tasks performed than the general worker group.

Many of the functions performed by career ladder members were specific to a major command. This indicates there may be some differences among the major commands in the functions performed. Examples of functions performed primarily by one major command include cargo parachutes and fabric items (MAC), and thermal curtains (SAC). MAJCOM differences are discussed later in the report. Most individuals, however, spend most of their total job time servicing parachute systems and flotation equipment. Out of all the parachute systems serviced, personnel parachutes were the most common.

### Comparison to Previous Survey

The results of this survey were compared to the results of the last survey, AFPT 90-427-403, dated December 1980. Overall, the previous survey found a similar breakdown in jobs to the present survey (Table 3). As in the present survey, a large group of general Parachute and Liferaft Personnel (N=228) was identified. This was, in large part, followed by jobs smaller in scope dealing with more specific aspects of the career ladder.

The 1980 survey found the career ladder highly homogeneous, with the majority of personnel concentrated in three duties: servicing and repairing parachutes; inspecting, maintaining, and repairing liferafts; and inspecting, maintaining, and repairing life preservers. Similar results were found in the current survey. Examples of jobs found in the current survey, but not identified as separate and distinct jobs in the previous survey, include the Upholstery, Refurbishment, and Protective Covers Personnel jobs. These three functions were included in the Fabric Repair Personnel job in the 1980 survey. Another difference involves new parachute systems brought on-line since the last survey. This primarily involves the ACES II personnel recovery parachute system employed on the newer aircraft.

### DAFSC ANALYSIS

In addition to analyzing the career ladder structure, examining skill levels is helpful in understanding a career ladder. The DAFSC analysis compares skill levels, highlighting differences in the tasks performed at the different levels. This information can be useful in evaluating how well various career ladder documents, such as AFR 39-1 Specialty Descriptions and the Specialty Training Standards (STS), reflect what career ladder personnel are actually doing in the field.

Three-skill level personnel were combined with 5-skill level personnel for this analysis. Both skill levels perform the same functions, even though there is some increase in supervisory and administrative duties at the 5-skill level. Background information and the tasks performed at the skill levels shows an overall progression from the more technically-oriented jobs at the 3 and 5-skill level to more administrative and supervisory functions at the skill level. The distribution of skill level groups across each job is shown in Table 4. To give a sense of the progression through the skill levels, relative time spent on each duty by skill level is presented in Table 5.

The 663 airmen with a DAFSC of 42733 or 42753 comprise 77 percent of the total AFSC 427X3 sample. Personnel with either skill level designation perform a very technically-oriented job consisting primarily of servicing personnel parachute systems, life preservers, and life rafts. The overall servicing of these three functions accounts for 36 percent of their total job time. Common tasks performed include packing and inspecting life preservers and personnel parachutes, and inflating and deflating life rafts. This is a

TABLE 3

AFSC 427X3 JOB SPECIALTY COMPARISONS BETWEEN  
CURRENT AND PREVIOUS SURVEYS

1987 JOB GROUPS (N=863)		1980 JOB GROUPS (N=872)	
I.	GENERAL PARACHUTE AND FLOTATION PERSONNEL - 54%	I.	PARACHUTE AND LIFERAFT PERSONNEL - 26%
II.	PROTECTIVE AND ORGANIZATIONAL CLOTHING PERSONNEL - 2%	II.	SURVIVAL EQUIPMENT PERSONNEL - 6%
III.	UPHOLSTERY PERSONNEL - *	III.	PARACHUTE AND LIFERAFT NCOICs - 2%
IV.	FLOTATION PERSONNEL - 10%	IV.	LIFE PRESERVER PERSONNEL - 2%
V.	PERSONNEL PARACHUTE PERSONNEL - 6%	V.	PARACHUTE PERSONNEL - 15%
VI.	DECELERATION AND DROGUE PARACHUTE PERSONNEL - *	VI.	DECELERATION AND DROGUE PARACHUTE PERSONNEL - 2%
VII.	SUPERVISORY PERSONNEL - 9%	VII.	FABRICATION AND PARACHUTE SHOP FOREMEN - 12%
VIII.	PROTECTIVE COVERS PERSONNEL - *	VIII.	PARACHUTE AND FLOTATION EQUIPMENT PERSONNEL - 2%
IX.	REFURBISHMENT PERSONNEL - 1%	IX.	FABRIC REPAIR PERSONNEL - 5%
X.	INSTRUCTORS - *	X.	PARACHUTE REPAIR NCOICs - 13%
XI.	CARGO PARACHUTE PERSONNEL - 4%	XI.	CARGO/AERIAL DELIVERY PARACHUTE REPAIR ASSISTANTS - 4%
XII.	OTHER - 12%	XII.	OTHER - 11%

\* Less than 1 percent



TABLE 4

DISTRIBUTION OF AFSC 427X3 SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS  
(PERCENT RESPONDING)

JOB GROUPS	DAFSC 42733/53 (N=663)	DAFSC 42773 (N=200)
I. GENERAL PARACHUTE AND FLOTATION PERSONNEL (N=467)	57	44
II. PROTECTIVE AND ORGANIZATIONAL CLOTHING PERSONNEL (N=15)	2	2
III. UPHOLSTERY PERSONNEL (N=5)	*	1
IV. FLOTATION PERSONNEL (N=84)	12	2
V. PERSONNEL PARACHUTE PERSONNEL (N=56)	8	2
VI. DECELERATION AND DROGUE PARACHUTE PERSONNEL (N=5)	*	*
VII. SUPERVISORY PERSONNEL (N=76)	2	32
VIII. PROTECTIVE COVERS PERSONNEL (N=5)	*	*
IX. REFURBISHMENT PERSONNEL (N=12)	1	2
X. INSTRUCTORS (N=5)	*	*
XI. CARGO PARACHUTE PERSONNEL (N=32)	4	2
PERCENT NOT GROUPED	12	11

\* Less than 1 percent

TABLE 5

RELATIVE TIME SPENT ON DUTIES BY DAFSC 427X3 SKILL-LEVEL MEMBER

DUTIES	DAFSC 42733/53 (N=663)	DAFSC 42773 (N=200)
A. ORGANIZING AND PLANNING	2	10
B. DIRECTING AND IMPLEMENTING	3	12
C. INSPECTING AND EVALUATING	3	12
D. TRAINING	2	6
E. PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	8	14
F. PERFORMING GENERAL MAINTENANCE FUNCTIONS	5	3
G. SERVICING CARGO TYPE PARACHUTE SYSTEMS	3	1
H. SERVICING DECELERATION (DRAG) PARACHUTE SYSTEMS	5	3
I. SERVICING DROGUE PARACHUTE SYSTEMS	2	1
J. SERVICING MISSILE OR DRONE RECOVERY PARACHUTE SYSTEMS	*	*
K. SERVICING PERSONNEL PARACHUTE SYSTEMS	13	6
L. SERVICING PERSONNEL RECOVERY SYSTEM PARACHUTES	3	1
M. PERFORMING GENERAL PARACHUTE SYSTEM SERVICING FUNCTIONS	1	*
N. TESTING AND DEVELOPING PARACHUTES	*	*
O. SERVICING LIFE RAFTS	11	5
P. SERVICING LIFE PRESERVERS	12	5
Q. SERVICING ESCAPE SLIDES	*	*
R. SERVICING PROTECTIVE AND ORGANIZATIONAL CLOTHING OR INDIVIDUAL EQUIPMENT	6	4
S. MANUFACTURING, REPAIRING, AND MODIFYING AIRCRAFT FABRIC ITEMS	2	2
T. INSPECTING, MANUFACTURING, AND REPAIRING AIRCRAFT SOUNDPROOFING AND UPHOLSTERY	3	1
U. INSPECTING, REPAIRING, AND MANUFACTURING PROTECTIVE COVERS AND BOMB OR STRAFING TARGETS	*	*
V. INSPECTING, MANUFACTURING, AND REPAIRING RESTRAINING EQUIPMENT	*	*
W. INSPECTING, REPAIRING, AND MANUFACTURING THERMAL CURTAINS	2	1
X. MAINTAINING EXPLOSIVE AND HAZARDOUS DEVICES	1	*
Y. MAINTAINING MOBILE EQUIPMENT AND FACILITIES	*	*
Z. MAINTAINING SHOP FACILITIES AND EQUIPMENT	11	9

\* Less than 1 percent

homogeneous group with a very large job. Table 4 shows that most members in this group were utilized in the General Parachute and Flotation Personnel job. Their job averages 197 tasks, several of which are listed in Table 6.

The DAFSC 42773 group consists of 200 individuals, accounting for 23 percent of the total AFSC 427X3 sample. They perform much of the supervisory and administrative functions of the career ladder. These supervisory and administrative duties account for 54 percent of their total job time. Even though these individuals have their major emphasis in managerial areas, technical tasks still comprise a large part of their total job. Individuals at this skill level have a very broad job averaging 240 tasks. Jobs most likely to include these skill level personnel are the General Parachute and Flotation Personnel and Supervisory Personnel jobs (Table 4). Representative tasks for 7-skill level members are listed in Table 7.

In summary, AFSC 427X3 personnel follow an orderly skill level progression, moving from the more technically-oriented jobs into supervisory and administrative functions. Members at every skill level perform a very large job. Seven-skill level personnel, for example, though primarily performing management duties, also carry out a number of technical tasks.

#### AFR 39-1 SPECIALTY DESCRIPTIONS

Occupational survey data are also used to examine classification issues. By comparing those jobs performed in a career ladder to the specialty descriptions, judgments can be made about the descriptions' completeness and accuracy.

AFR 39-1 Specialty Descriptions are intended to give a very broad description of the responsibilities held by the various skill levels within a career ladder. When compared with the survey data, the AFR 39-1 Specialty Description for the Fabrication and Parachute Specialist (DAFSCs 42713, 42733, 42753), dated 30 April 1987, accurately reflects the duties and tasks being accomplished at these skill levels. In general, these personnel are assembling, inspecting, cleaning, repairing, and packing parachute systems and flotation equipment. They are also servicing fabric and rubberized items. A few areas need review, however. No mention is made of drogue or personnel recovery parachutes. Also, mention of aerial delivery parachutes may not be necessary, since that function is covered by mention of cargo parachutes.

The AFR 39-1 Specialty Description for Fabrication and Parachute Supervisor (DAFSC 42773), dated 30 April 1987, is also generally supported by the survey data. The duties and tasks performed by 7-skill level personnel are primarily supervisory in nature, with some technical functions performed. The Specialty Summary section, however, needs to include more of the duties discussed in the Duties and Responsibilities section. These include referring to the technical functions performed by 7-skill level personnel, and alluding to their role in establishing and conducting on-the-job training for career

TABLE 6

## REPRESENTATIVE TASKS PERFORMED BY DAFSC 42733/53 PERSONNEL

TASKS	PERCENT PERFORMING (N=663)
F243 CUT STENCILS	84
Z1187 CLEAN SEWING MACHINES	79
P800 PACK LIFE PRESERVERS	76
P793 DEFLATE LIFE PRESERVERS	75
P795 INFLATE LIFE PRESERVERS	74
P798 INSPECT LIFE PRESERVERS	74
Z1218 LUBRICATE SEWING MACHINES	73
P804 PERFORM LEAKAGE INSPECTION OF LIFE PRESERVERS	73
P803 PERFORM FUNCTIONAL TESTS OF LIFE PRESERVERS	73
0746 INFLATE LIFE RAFTS	71
Z1204 INSPECT SEWING MACHINES	71
0743 DEFLATE LIFE RAFTS	70
P794 DETERMINE REPAIRABILITY OF DAMAGED LIFE PRESERVERS	70
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	69
Z1184 CLEAN PARACHUTE PACKING TABLES	69
P811 REMOVE LIFE PRESERVER CELLS	68
P817 REPLACE LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	68
E211 MAINTAIN AFTO FORMS 391 (PARACHUTE LOG)	68
P818 REPLACE LIFE PRESERVER CELLS	67
P810 REMOVE LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	67
0758 PERFORM LEAKAGE INSPECTION OF LIFE RAFTS	67
K522 INSPECT PERSONNEL PARACHUTES	67
0744 DETERMINE CORRECTED PRESSURES FOR LIFE RAFTS	67
K524 PACK PERSONNEL PARACHUTES	67
P826 WEIGH LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	67
0739 APPLY TALCUM POWDER TO LIFE RAFTS	67
Z1176 ADJUST SEWING MACHINES	66
0789 VISUALLY INSPECT LIFE RAFTS	66
P825 VISUALLY INSPECT LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES FOR SERVICEABILITY	66
0745 DETERMINE REPAIRABILITY OF DAMAGED LIFE RAFTS	65
0791 WEIGH LIFE RAFT CO2 BOTTLES	64
P820 REPLACE LIFE PRESERVER INFLATORS	63
P813 REMOVE LIFE PRESERVER INFLATORS	63
Z1183 CLEAN FACILITIES	63
0769 REMOVE LIFE RAFT CO2 CYLINDERS	63
P819 REPLACE LIFE PRESERVER CONTAINERS	63
F278 PERFORM STENCILING OF DATA ONTO ITEMS, SUCH AS EQUIPMENT, CLOTHING, AND AIRCRAFT OR PARACHUTE COMPONENTS	62
P812 REMOVE LIFE PRESERVER CONTAINERS	62
E190 ANNOTATE DD FORMS 1577 (UNSERVICEABLE (CONDEMNED) TAG MATERIEL)	61
0778 REPLACE LIFE RAFT CO2 CYLINDERS	61

TABLE 7  
REPRESENTATIVE TASKS PERFORMED BY DAFSC 42773 PERSONNEL

TASKS	PERCENT PERFORMING (N=200)
C140 WRITE APR	87
B49 COUNSEL SUBORDINATES ON MILITARY-RELATED PROBLEMS	86
C121 INSPECT COMPLETED WORK	85
B50 COUNSEL SUBORDINATES ON PERSONAL-RELATED PROBLEMS	82
E190 ANNOTATE DD FORMS 1577 (UNSERVICEABLE (CONDEMNED) TAG MATERIEL)	81
E184 ANNOTATE DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	79
A5 COORDINATE WORK ACTIVITIES WITH OTHER UNITS	78
D161 MAINTAIN AF FORMS 623 (ON-THE-JOB TRAINING RECORD)	77
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	76
C125 INSPECT PERSONNEL	75
A29 ESTABLISH WORK PRIORITIES	75
A6 COORDINATE WORK ACTIVITIES WITH SHOP SECTIONS	75
C123 INSPECT LOCALLY MANUFACTURED ITEMS	74
C124 INSPECT LOCALLY REPAIRED ITEMS	73
B85 SUPERVISE FABRICATION AND PARACHUTE SPECIALISTS (AFSC 42753)	72
Z1204 INSPECT SEWING MACHINES	72
B77 INTERPRET POLICIES FOR SUBORDINATES	71
B80 ORIENT NEWLY ASSIGNED PERSONNEL	71
D165 REVIEW TRAINING PROGRESS OF INDIVIDUALS	71
E225 ORDER SUPPLIES	71
Z1247 TIME SEWING MACHINES	70
Z1176 ADJUST SEWING MACHINES	69
F243 CUT STENCILS	68
P794 DETERMINE REPAIRABILITY OF DAMAGED LIFE PRESERVERS	51
B90 WRITE JUSTIFICATIONS FOR EQUIPMENT	50
D157 EVALUATE TRAINING METHODS	50
Z1193 DISCONNECT ELECTRICAL POWER SOURCE, SUCH AS CORDS OR PLUGS	50
A16 ESTABLISH DETAIL ROSTERS	50
D158 EVALUATE TRAINING PROGRAMS	50
P800 PACK LIFE PRESERVERS	50
K516 DETERMINE REPAIRABILITY OF DAMAGED PERSONNEL PARACHUTES	50
F244 INSTALL HARDWARE ON TARPS	50
B70 IMPLEMENT PERSONNEL RECOGNITION PROGRAMS	49
B62 DIRECT PERSONNEL PARACHUTE SECTION FUNCTIONS	49
A42 SCHEDULE EQUIPMENT FOR CALIBRATION	49
E228 PLACE SUPPLIES INTO STORAGE	49
P795 INFLATE LIFE PRESERVERS	49
P793 DEFLATE LIFE PRESERVERS	49
P825 VISUALLY INSPECT LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES FOR SERVICEABILITY	48

ladder personnel. As in the 1-, 3-, and 5-skill Specialty Description, there is no reference to drogue and personnel recovery parachutes. Cargo and aerial delivery parachutes are also mentioned separately in this description.

### MAJCOM ANALYSIS

Occupational survey data can be used in examining differences in duty and task performance data across major commands. Highlighting these differences may identify any specific needs MAJCOMs may have due to distinguishing performance functions. The six MAJCOMs that most predominantly utilize AFSC 427X3 personnel are examined in this analysis: USAFE, ATC, MAC, PACAF, SAC, and TAC. Table 8 shows the relative time spent performing duties across these MAJCOMs.

The differences identified among AFSC 427X3 MAJCOMs are, for the most part, due to the specific missions performed by those major commands and the resulting career ladder duties they require. ATC personnel, for example, spent the largest portion of job time of any MAJCOM servicing personnel parachute systems (24 percent), and the least on flotation equipment (9 percent). This could be due to their work on T-37 and T-38 aircraft. They also spend a large portion of their time on training (8 percent), a difference which is common to ATC personnel in many career ladders.

MAC, the largest utilizing command, has their personnel spending more time on flotation equipment (23 percent) than most other major commands. They also service cargo parachute systems and fabric items to a greater extent than other major commands. On the other hand, only SAC personnel work with thermal curtains to any large extent. Personnel in MAJCOMs which employ tactical aircraft (such as TAC and USAFE) service personnel recovery parachute systems more than other major commands. They also service protective and organizational clothing and individual equipment more than other MAJCOMs.

Overall, the differences among the above-mentioned major commands were dependent upon the specific mission of the MAJCOM. Major commands, such as USAFE and TAC, which employ much the same type of aircraft have a more similar job than TAC and MAC. All MAJCOMs performed a large job involving a common set of general tasks in addition to a set of mission specific tasks.

### TRAINING ANALYSIS

Information gathered from occupational survey data is also used to assist in the development or evaluation of formal training programs or training documents, such as the Specialty Training Standard (STS) and Plan of Instruction (POI). A particularly important factor which may be used for this purpose is the percentage of an appropriate group, such as first-enlistment (1-48 months

TABLE 8

## RELATIVE PERCENT TIME SPENT ON DUTIES BY AFSC 427X3 MAJOR COMMAND GROUPS

	USAFE (N=64)	ATC (N=50)	MAC (N=282)	PACAF (N=51)	SAC (N=164)	TAC (N=208)
A. ORGANIZING AND PLANNING	5%	3%	4%	4%	5%	4%
B. DIRECTING AND IMPLEMENTING	5%	6%	4%	6%	5%	4%
C. INSPECTING AND EVALUATING	6%	5%	5%	4%	5%	5%
D. TRAINING	3%	8%	2%	3%	3%	3%
E. PERFORMING ADMINISTRATIVE AND SUPPLY FUNCTIONS	10%	8%	9%	9%	9%	11%
F. PERFORMING GENERAL MAINTENANCE FUNCTIONS	6%	3%	4%	4%	4%	5%
G. SERVICING CARGO TYPE PARACHUTE SYSTEMS	1%	*	8%	*	*	*
H. SERVICING DECELERATION (DRAG) PARACHUTE SYSTEMS	9%	2%	*	6%	7%	7%
I. SERVICING DROGUE PARACHUTE SYSTEMS	2%	3%	*	3%	1%	3%
J. SERVICING MISSILE OR DRONE RECOVERY PARACHUTE SYSTEMS	*	*	*	*	*	*
K. SERVICING PERSONNEL PARACHUTE SYSTEMS	5%	24%	9%	11%	17%	10%
L. SERVICING PERSONNEL RECOVERY SYSTEM PARACHUTES	4%	3%	*	5%	*	5%
M. PERFORMING GENERAL PARACHUTE SYSTEM SERVICING FUNCTIONS	1%	2%	*	*	1%	1%
N. TESTING AND DEVELOPING PARACHUTES	*	*	*	*	*	*
O. SERVICING LIFE RAFTS	7%	4%	12%	11%	10%	8%
P. SERVICING LIFE PRESERVERS	10%	5%	11%	14%	8%	10%
Q. SERVICING ESCAPE SLIDES	*	*	1%	1%	*	*
R. SERVICING PROTECTIVE AND ORGANIZATIONAL CLOTHING OR INDIVIDUAL EQUIPMENT	11%	3%	4%	7%	3%	10%
S. MANUFACTURING, REPAIRING, AND MODIFYING AIRCRAFT FABRIC ITEMS	*	3%	4%	*	2%	*
T. INSPECTING, MANUFACTURING, AND REPAIRING AIRCRAFT SOUNDPROOFING AND UPHOLSTERY	*	2%	5%	*	2%	*
U. INSPECTING, REPAIRING, AND MANUFACTURING PROTECTIVE COVERS AND BOMB OR STRAFING TARGETS	1%	*	*	*	*	1%
V. INSPECTING, MANUFACTURING, AND REPAIRING RESTRAINING EQUIPMENT	*	*	2%	*	*	*
W. INSPECTING, REPAIRING, AND MANUFACTURING THERMAL CURTAINS	*	*	*	1%	7%	*
X. MAINTAINING EXPLOSIVE AND HAZARDOUS DEVICES	*	2%	1%	1%	1%	1%
Y. MAINTAINING MOBILE EQUIPMENT AND FACILITIES	*	*	*	*	*	*
Z. MAINTAINING SHOP FACILITIES AND EQUIPMENT	11%	11%	11%	7%	9%	10%

\* Less than 1 percent

TAFMS) personnel, performing tasks. In addition, the secondary task factors of training emphasis or task difficulty ratings (as explained in the Task Factor Administration section) provide useful information.

Technical school personnel have matched nonmanagerial inventory tasks to appropriate STS or POI sections to facilitate use of occupational survey data to evaluate the relevance and completeness of these documents. Computer listings which display the STS or POI with matched tasks and survey data are used in the analysis to show which sections of the STS or POI are most relevant to the career ladder. They may also be used to show which tasks not matched to these documents may need to be included due to the extent to which they are performed in the career ladder and their importance to training. To aid in any further detailed review of training documents, these computer displays have been forwarded to the technical school. In addition to a summary of that information, this section contains an analysis of the first-enlistment personnel. Figure 2 shows the distribution of first-enlistment personnel across the job groups discussed in the SPECIALTY JOBS section of this report.

#### Training Emphasis and Task Difficulty Data

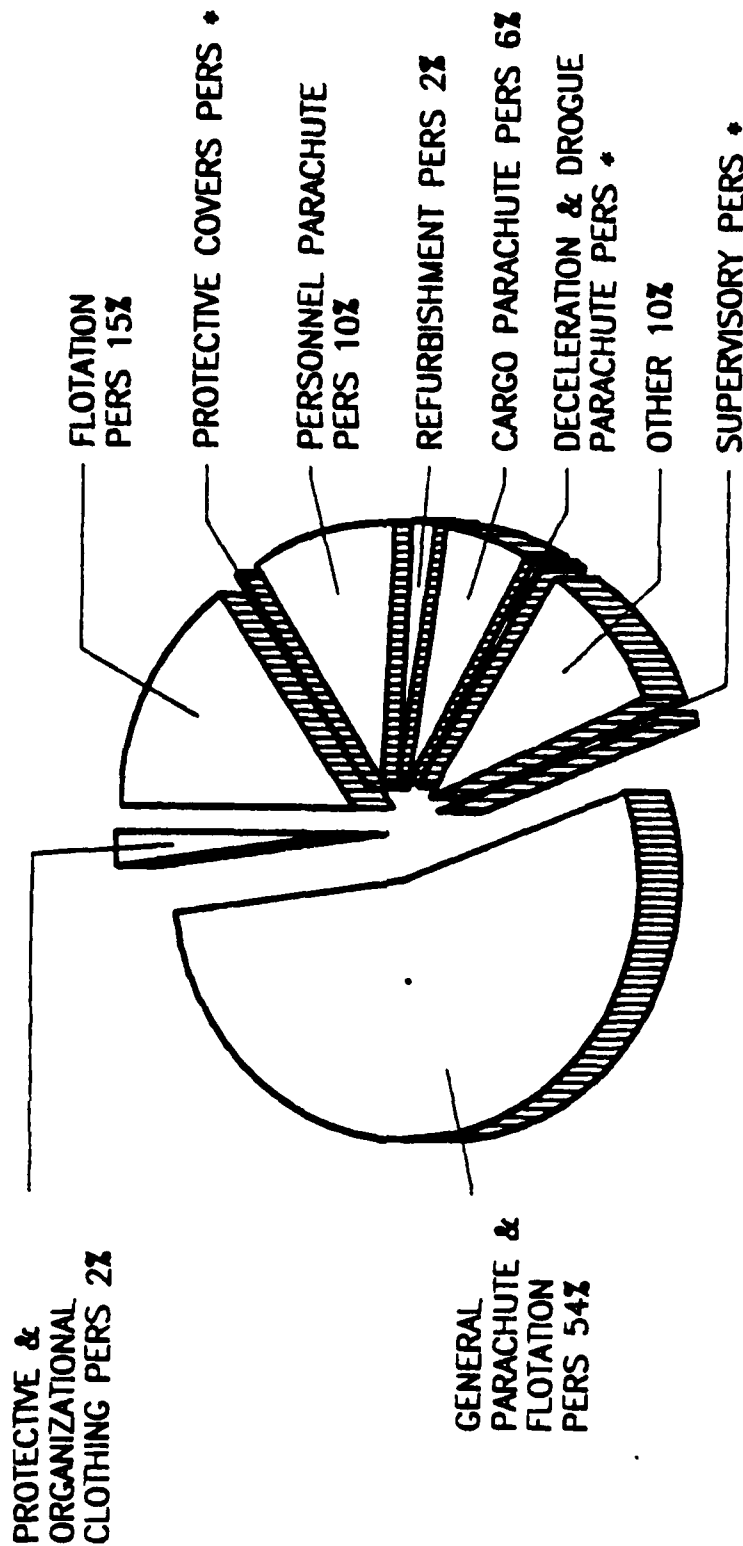
The objective of collecting TE and TD ratings is to develop rank-ordered listings of tasks in terms of importance for first-term training and in terms of difficulty. These lists of inventory tasks are included in both the Analysis and Training Extracts, with TE and TD ratings accompanying each inventory task displayed in the Training Extract. (For a more detailed explanation of both types of ratings, see Task Factor Administration in the SURVEY METHODOLOGY section.) Tasks performed by moderate to high percentages of personnel may warrant resident technical training. TE and TD ratings, composed of the opinions of experienced career ladder personnel, are secondary factors that may assist training developers in deciding which tasks should be emphasized for entry-level training. Those tasks receiving high task factor ratings, but performed by low percentages of first-enlistment personnel, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best left out of training for new personnel, but this decision must be weighed against percentages of personnel performing the tasks and other task considerations. Finally, a new product has been added to the Training Extract. Automated Training Indicators (ATI) give technical school personnel an objective, categorical training decision indicator based on Atch 1, ATRC 52-22.

#### AFSC 427X3 Training Issues

A. First-Enlistment Personnel. There are 423 first-enlistment personnel in this sample of the career ladder, accounting for 49 percent of the total. This group of first-termers performs a very varied job dealing primarily with servicing personnel parachute systems and flotation equipment. They are also heavily involved in maintaining shop facilities and equipment. Thus, they perform a very technical job, with little administrative and supervisory duties. AFSC 427X3 first-enlistment personnel perform an average of 170 tasks, some of which are listed in Table 9.



# AFSC 427X3 FIRST-ENLISTMENT SPECIALTY JOBS



\* LESS THAN 1 PERCENT

Figure 2

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT  
(1-48 MONTHS TAFMS) AFSC 427X3 PERSONNEL

TASKS	PERCENT PERFORMING (N=200)
F243 CUT STENCILS	84
Z1187 CLEAN SEWING MACHINES	78
P800 PACK LIFE PRESERVERS	75
P795 INFLATE LIFE PRESERVERS	75
P798 INSPECT LIFE PRESERVERS	74
P793 DEFLATE LIFE PRESERVERS	74
P803 PERFORM FUNCTIONAL TESTS OF LIFE PRESERVERS	73
P804 PERFORM LEAKAGE INSPECTION OF LIFE PRESERVERS	73
Z1184 CLEAN PARACHUTE PACKING TABLES	71
0746 INFLATE LIFE RAFTS	71
Z1218 LUBRICATE SEWING MACHINES	70
0743 DEFLATE LIFE RAFTS	70
P794 DETERMINE REPAIRABILITY OF DAMAGED LIFE PRESERVERS	69
P817 REPLACE LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	68
P810 REMOVE LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	68
P811 REMOVE LIFE PRESERVER CELLS	67
Z1204 INSPECT SEWING MACHINES	66
0758 PERFORM LEAKAGE INSPECTION OF LIFE RAFTS	66
K522 INSPECT PERSONNEL PARACHUTES	66
0789 VISUALLY INSPECT LIFE RAFTS	66
K524 PACK PERSONNEL PARACHUTES	66
0739 APPLY TALCUM POWDER TO LIFE RAFTS	66
P818 REPLACE LIFE PRESERVER CELLS	66
P825 VISUALLY INSPECT LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES FOR SERVICEABILITY	65
P826 WEIGH LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	65
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	65
0744 DETERMINE CORRECTED PRESSURES FOR LIFE RAFTS	65
E211 MAINTAIN AFTO FORMS 391 (PARACHUTE LOG)	64
0791 WEIGH LIFE RAFT CO2 BOTTLES	64
Z1176 ADJUST SEWING MACHINES	63
Z1183 CLEAN FACILITIES	63
0769 REMOVE LIFE RAFT CO2 CYLINDERS	62
P820 REPLACE LIFE PRESERVER INFLATORS	62
P813 REMOVE LIFE PRESERVER INFLATORS	62
0745 DETERMINE REPAIRABILITY OF DAMAGED LIFE RAFTS	62
F278 PERFORM STENCILING OF DATA ONTO ITEMS, SUCH AS EQUIPMENT, CLOTHING, AND AIRCRAFT OR PARACHUTE COMPONENTS	62
Z1193 DISCONNECT ELECTRICAL POWER SOURCE, SUCH AS CORDS OR PLUGS	59
Z1188 CLEAN STENCIL MACHINES	59

B. Equipment. Personnel in AFSC 427X3 use many different types of equipment in performing their jobs. Survey data can point out which equipment is used most and by what group. This information can then be used by training specialists in determining which types of equipment should be emphasized for first-term training. This will suggest which equipment should be specified for training, and also show utilization patterns. One would expect that as experience increases, duties become more supervisory/administrative and less hands-on. Thus, the more experienced one becomes, the less he or she will utilize equipment. Table 10 lists examples of equipment utilized by first-term, second-term, and career groups. Many of these examples first show an increase in utilization of equipment from the first-term to the second-term, and then the expected decrease. Notice, however, that even with an increase in experience, senior personnel still utilize a great deal of equipment.

Table 10 displays those pieces of equipment utilized by 50 percent or more of first-enlistment personnel. Equipment utilized by 50 percent or more of first-term airmen should normally receive hands-on training in the basic course. A full computer listing of all equipment items and the associated percent members utilizing is included in a Training Extract to this report. This Extract is supplied to all training and utilization personnel, as well as other interested users who require this information.

C. Specialty Training Standard (STS). An STS is intended to provide comprehensive coverage of tasks performed by career ladder personnel. To assess the effectiveness of the AFSC 427X3 STS, dated November 1986, STS sections were compared to survey data. Sections containing managerial, general information, or knowledge areas were not reviewed. In addition to examining how well survey data supported STS items, analysis also explored which additional areas might need to be included in the STS, based on survey findings.

Fourteen performance items in the STS were not supported by survey data. These STS items were matched to tasks with fewer than 20 percent of any skill level group performing them. Table 11 lists these performance items. A number of these items dealt with functions of the career ladder unique to one major command. Items in STS paragraph 20, for example, deal with Aircraft Thermal Radiation Barrier Curtains. Only SAC personnel perform this function to any great extent. Most of these items were, therefore, not performed by over 20 percent of any skill level group and, thus, not supported by survey data. Subject-matter experts should review these areas for functions performed uniquely within a single major command. Subject-matter experts need to consider either eliminating all items performed by low percentages of career ladder personnel or having these duties covered in a command Job Qualification Standard (JQS).

Three-skill level proficiency codes can also be analyzed to determine how well they correspond to first-term performance levels. Items matched to tasks performed by over 30 percent of first-enlistment personnel normally should have a task performance or task knowledge proficiency code at the 3-skill level, unless other factors warrant otherwise. This would warrant inclusion in the resident course. By the same token, items matched to tasks performed by under 30 percent of those personnel should not have a 3-skill level proficiency code and, thus, no resident course training.

TABLE 10  
EXAMPLES OF EQUIPMENT USED BY AFSC 427X3 TAFMS GROUPS

EQUIPMENT	PERCENT MEMBERS UTILIZING		
	1-48 MONTHS	49-96 MONTHS	97+ MONTHS
AIR COMPRESSORS	65	72	60
BALANCE, GRAM SCALES	66	76	73
BENCH VISES	62	67	70
CANOPY GO-NO-GO GAUGES	51	59	55
CONSEW, MEDIUM WEIGHT (UNIVERSAL TYPE) SEWING MACHINE	70	70	71
DRYING TOWERS (NON PORTABLE)	67	68	61
GROMMET PRESSES, SUCH AS HAND OR PORTABLE PRESSES	87	90	81
MECHANICAL FORCE GAUGES, SUCH AS PUSH-PULL OR DIAL GAUGE	52	63	58
PRESSURE GAUGES	67	73	69
RIPCORDER PIN TESTING BLOCKS	64	70	65
STENCIL MACHINES	86	86	83
TORQUE SCREWDRIVERS	76	79	76
TORQUE WRENCHES	74	78	71
VACUUM CLEANERS	84	87	81
WAX POTS	79	87	83
WEIGHTS	67	68	70
ZIG ZAG MACHINE	51	54	50

TABLE 11

## AFSC 427X3 STS ITEMS NOT SUPPORTED BY OSR DATA

STS REFERENCE/TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
13C USE HAND SEAMS					
S946 PATCH DAMAGED AERODYNAMIC SEALS	3%	3%	2%	.73	5.90
S947 PATCH DAMAGED WING BALANCE SEALS	4%	5%	3%	.88	6.13
-----					
17E(2) INSPECT CARGO AND AERIAL DELIVERY PARACHUTES - B					
G305 INSPECT CARGO TYPE PARACHUTES	13%	13%	9%	2.85	5.50
-----					
17E(3) PACK CARGO AND AERIAL DELIVERY PARACHUTES - B					
G308 PACK CARGO PARACHUTES	12%	13%	7%	2.97	5.23
-----					
17J STORE PARACHUTE SYSTEMS					
M703 PREPARE PARACHUTES FOR STORAGE	10%	13%	12%	2.21	4.39
-----					
17K SHIPMENT OF PARACHUTE SYSTEMS					
M702 PREPARE PARACHUTES FOR SHIPMENT	6%	11%	16%	1.82	4.33
-----					
20B INSPECT AIRCRAFT THERMAL RADIATION BARRIER CURTAINS - B					
W1097 INSPECT AIRCRAFT THERMAL CURTAINS	17%	19%	19%	3.29	5.10
W1098 INSPECT PULL TABS ON THERMAL CURTAINS	15%	17%	14%	2.65	4.36

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 11 (CONTINUED)

AFSC 427X3 STS ITEMS NOT SUPPORTED BY OSR DATA

STS REFERENCE/TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
20D REPAIR AIRCRAFT THERMAL RADIATION BARRIER CURTAINS - B					
W1128 REPAIR AIRCRAFT THERMAL CURTAINS	16%	18%	15%	3.68	5.59
W1112 PATCH HOLES IN THERMAL CURTAINS	16%	19%	15%	3.21	5.04
20E FIT AIRCRAFT THERMAL RADIATION BARRIER CURTAINS - B					
W1094 FIT AIRCRAFT THERMAL CURTAINS	11%	13%	12%	2.88	4.91
W1093 FIT AIRCRAFT DIVIDER CURTAINS	3%	5%	8%	2.09	4.19
20F FABRICATE AIRCRAFT THERMAL RADIATION BARRIER CURTAINS - B					
W1092 FABRICATE THERMAL CURTAIN PATTERNS	6%	8%	7%	2.71	6.26
W1110 MANUFACTURE AIRCRAFT THERMAL CURTAINS	3%	5%	7%	1.97	6.70
21B INSPECT SAFETY BELTS, SHOULDER HARNESS, AND RESTRAINT EQUIPMENT - B					
V1064 INSPECT AIRCRAFT SEAT BELTS	14%	16%	17%	3.47	4.64
V1065 INSPECT AIRCRAFT SHOULDER HARNESSES	12%	12%	15%	2.94	4.67

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 11 (CONTINUED)

AFSC 427X3 STS ITEMS NOT SUPPORTED BY OSR DATA

STS REFERENCE/TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
21C CLEAN SAFETY BELTS, SHOULDER HARNESS, AND RESTRAINT EQUIPMENT - B					
V1060 CLEAN AIRCRAFT SEAT BELTS	7%	7%	7%	1.71	4.20
V1061 CLEAN AIRCRAFT SHOULDER HARNESSES	6%	7%	7%	1.56	4.31
21E TEST SAFETY BELTS, SHOULDER HARNESS, AND RESTRAINT EQUIPMENT - B					
V1071 PERFORM STATIC WEIGHT TESTS ON PERSONNEL RESTRAINT EQUIPMENT, SUCH AS SEAT BELTS OR SHOULDER HARNESSES	12%	14%	15%	3.12	5.51
V1072 PERFORM STATIC WEIGHT TESTS ON SLINGS	1%	2%	1%	1.85	5.67
22C(2) INSPECT ESCAPE SLIDES - A					
Q833 INSPECT ESCAPE SLIDES	8%	9%	6%	1.94	4.92
Q836 PERFORM FUNCTIONAL TESTS OF ESCAPE SLIDES	7%	8%	5%	2.03	4.58
22C(3) PACK ESCAPE SLIDES - A					
Q834 PACK ESCAPE SLIDES	8%	9%	6%	2.24	5.93

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

Table 12 lists those items supported by over 30 percent of first-termers, but with no proficiency code at the 3-skill level so as to allow for inclusion in a training course. Subject-matter experts should examine these items to ascertain whether the proficiency codes should be changed to a knowledge or performance coding. Several other items had 3-skill level proficiency codes, but low percentages of first-enlistment personnel performing them. Table 13 gives a listing of these STS items. Subject-matter experts need to review these items to determine if proficiency codes at the 3-skill level should be removed and, thus, eliminated from inclusion in a training course.

An additional area of analysis involves examining tasks not matched to any item in the STS. Unreferenced tasks performed by at least 20 percent of a major group, such as first-enlistment personnel, are performed to an extent great enough to be considered for inclusion in the STS. Additionally, tasks with high TE or TD ratings should be examined for possible STS inclusion. A number of the top unreferenced tasks centered around life raft cylinders. Examples of these and other unreferenced tasks are listed in Table 14, along with the percentage of first-enlistment and 5- and 7-skill level personnel performing them and task factor ratings.

D. Plan of Instruction (POI). This analysis examines the POI for Course C3ABR42733. This course deals with the techniques and functions of fabrication and parachute specialists. These include repairing flotation and anti-exposure suits, servicing parachute systems, and maintaining and operating sewing machines to fabricate and repair aircrew flight clothing, protective covers, and upholstery and aircraft soundproofing. Other topics taught include using technical orders, maintenance management, Air Force supply system, shop and flightline safety, career progression, and blueprint interpretation. Based on assistance from training specialists at Chanute AFB, the POI was matched with survey task statements. Computer printouts were then generated to display the results of the matching for use in this analysis and for a detailed review of training. A Plan of Instruction generally contains two types of objectives: knowledge objectives and performance objectives. Since task statements are relevant to performance objectives, rather than knowledge objectives, only performance objectives are reviewed in this analysis.

Guidelines outlined in ATCR 52-22 state a POI objective is supported by survey data if performed by 30 percent or more of all first-job (1-24 months TAFMS) or first-enlistment personnel. Following these guidelines, the data revealed 20 performance objectives, covering over 104 hours, performed by under 30 percent of all AFSC 427X3 first-job/first-enlistment personnel. These objectives were thus not supported by survey data. The majority of these objectives involve Recovery Parachute Systems (Block V) and Fabricated Items and Medium Weight Sewing Machines (Block VIII). These and other unsupported objectives are listed in Table 15.

Further analysis of these unsupported items, however, uncovered at least one MAJCOM supporting POI inclusion of all but two objectives (IPC and ~~IXSA~~ in Table 15). In other words, broken down by major command, the POI is well supported by survey data. At least one MAJCOM utilizes 30 percent or more of their first-termers in most POI objectives. Personnel recovery parachutes,



TABLE 12

AFSC 427X3 STS ITEMS WITH HIGH FIRST-ENLISTMENT PERCENT PERFORMING  
BUT NOT CODED AT THE 3-SKILL LEVEL

STS REFERENCE/TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
15E(4) OVERHAUL SHOP EQUIPMENT - B					
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	65%	72%	59%	5.94	4.35
17F ASSEMBLE PARACHUTE SYSTEMS - B					
K515 ASSEMBLE PERSONNEL PARACHUTE SYSTEMS	56%	61%	41%	6.35	6.51
H346 ASSEMBLE DECLARATION PARACHUTE SYSTEMS	32%	39%	31%	5.29	5.39
17G DISASSEMBLE PARACHUTE SYSTEMS - B					
K517 DISASSEMBLE PERSONNEL PARACHUTE SYSTEMS	55%	61%	40%	5.41	5.15
H349 DISASSEMBLE DECELERATION PARACHUTE SYSTEMS	31%	35%	29%	4.15	4.56
19E MODIFY PROTECTIVE CLOTHING - B					
R919 SEW HOLSTERS ONTO INDIVIDUAL EQUIPMENT, SUCH AS SURVIVAL VESTS OR HARNESES	34%	41%	34%	3.68	5.31
R925 SEW POCKETS ONTO INDIVIDUAL EQUIPMENT, SUCH AS SURVIVAL VESTS OR HARNESES	36%	44%	34%	3.74	5.37

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 13

AFSC 427X3 STS ITEMS WITH LOW FIRST-ENLISTMENT PERCENT PERFORMING  
CODED AT THE 3-SKILL LEVEL

STS REFERENCE/TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
5B USE TECHNICAL ORDER					
2b B					
E221 MAINTAIN TECHNICAL ORDER (TO) ASSOCIATED FORMS	5%	13%	42%	1.73	5.01
E234 RESEARCH PUBLICATION INFORMATION	6%	11%	35%	.85	5.13
6C USE STOCKLISTS					
b B					
E224 ORDER PARTS	12%	28%	66%	2.47	4.72
E225 ORDER SUPPLIES	17%	37%	71%	2.68	4.63
6D USE CATALOGS					
b B					
E224 ORDER PARTS	12%	28%	66%	2.47	4.72
E225 ORDER SUPPLIES	17%	37%	71%	2.68	4.63
6E USE APPLICABLE FORMS					
1b B					
E202 MAINTAIN AF FORMS 2413 (SUPPLY CONTROL LOG)	8%	24%	64%	3.68	4.31
E176 MAINTAIN AF FORMS 2005 (ISSUE/TURN IN REQUEST)	11%	26%	68%	2.24	4.56
100 LUBRICATE SHOP EQUIPMENT					
b B					
Z1216 LUBRICATE BELT TESTERS	5%	10%	15%	2.21	3.78
Z1219 LUBRICATE STENCIL MACHINES	25%	38%	42%	3.09	3.17

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 13 (CONTINUED)

AFSC 427X3 STS ITEMS WITH LOW FIRST-ENLISTMENT PERCENT PERFORMING  
CODED AT THE 3-SKILL LEVEL

STS REFERENCE/TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
17B(2) INSPECT RECOVERY SYSTEMS	2b	B			
L619 INSPECT PERSONNEL RECOVERY PARACHUTES	22%	26%	22%	4.32	5.88
L616 DETERMINE REPAIRABILITY OF DAMAGED PERSONNEL RECOVERY PARACHUTES	18%	20%	18%	2.44	5.58
17B(3) PACK RECOVERY SYSTEMS	2b	B			
L621 PACK PERSONNEL RECOVERY SYSTEM PARACHUTES	24%	27%	16%	4.29	6.34
L690 RESEQUENCE PERSONNEL RECOVERY SYSTEM PARACHUTE SUSPENSION LINES	6%	9%	7%	2.94	6.06
18B(2) UPHOLSTERY FABRICATION	1b	B			
F298 REUPHOLSTER VEHICLE SEATS	24%	30%	25%	2.24	7.09
S930 DESIGN PATTERNS FOR AIRCRAFT FABRIC ITEMS	22%	27%	32%	3.00	6.68
18C(2) SOUNDPROOFING FABRICATION	1b	B			
T980 CUT FABRIC MATERIAL FOR AIRCRAFT SOUNDPROOFING	27%	29%	24%	3.03	4.64
T983 CUT INSULATING MATERIAL FOR AIRCRAFT SOUNDPROOFING	23%	26%	23%	2.29	4.67
18D INSPECT SOUNDPROOFING	1b	B			
T988 INSPECT AIRCRAFT SOUNDPROOFING	24%	25%	25%	3.06	4.83

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 13 (CONTINUED)

AFSC 427X3 STS ITEMS WITH LOW FIRST-ENLISTMENT PERCENT PERFORMING  
CODED AT THE 3-SKILL LEVEL

STS	REFERENCE/TASKS	2b	B	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TNG EMP*	TASK DIFF**
19C	TEST PROTECTIVE CLOTHING							
	-----							
R865	INFLATION TEST TOXICOLOGICAL SUITS			21%	25%	22%	3.44	5.32
R928	TEST ANTIEXPOSURE SUITS FOR SERVICEABILITY			20%	21%	14%	2.38	5.14
	-----							
19D	REPAIR PROTECTIVE CLOTHING	2b	B					
	-----							
R852	CEMENT SEAMS OF ANTIEXPOSURE SUITS, SUCH AS BOOTS OF 16-P OR 21P SUITS			26%	30%	21%	3.76	5.85
R884	PATCH PROTECTIVE CLOTHING			19%	22%	20%	3.06	5.34
	-----							
19F	PACK PROTECTIVE CLOTHING	2b	B					
	-----							
R879	PACK TOXICOLOGICAL SUIT ACCESSORIES			14%	18%	17%	3.09	4.80
R880	PACK TOXICOLOGICAL SUITS			18%	22%	19%	3.24	4.71

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 14

EXAMPLES OF TASKS NOT REFERENCED TO AFSC 427X3 STS

TASKS	FIRST- ENLISTMENT (N=423)	5-SKILL LEVEL (N=554)	7-SKILL LEVEL (N=200)	TRAINING EMPHASIS*
0765 PROCESS LIFE RAFT CYLINDERS FOR REFILLING	34%	41%	34%	4.59
0763 PREPARE LIFE RAFT CYLINDERS FOR CONDEMNATION	25%	29%	24%	3.15
0764 PREPARE LIFE RAFT CYLINDERS FOR SHIPPING	19%	23%	21%	2.38
S934 INTERPRET BLUEPRINTS FOR AIRCRAFT FABRIC ITEMS	10%	13%	24%	3.00
S935 MANUFACTURE AIRCRAFT BLOW OUT PATCHES	20%	21%	18%	2.26

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

TABLE 15

ITEMS FROM PO1 C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMERS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
14B GIVEN A LIST OF 20 MAINTENANCE SITUATIONS, AND USING TECHNICAL ORDER 14S-1-102, RECORD THE INFORMATION ON A SEPARATE SHEET OF PAPER. 17 OF THE 20 RESPONSES MUST BE CORRECT.	3%	6%	.85	5.13
E234 RESEARCH PUBLICATION INFORMATION				
19C USING A CWU-16/P ANTI-EXPOSURE SUIT, A MANOMETER, TOOLS, AND TO 14P3-5-61, TEST THE SUIT FOR SERVICE- ABILITY. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH ONE INSTRUCTOR ASSIST PERMITTED. (2 HRS)	19%	20%	2.38	5.14
R928 TEST ANTIEXPOSURE SUITS FOR SERVICEABILITY				
19E USING A DAMAGED CWU-16/P ANTI-EXPOSURE SUIT, REPAIR MATERIAL, TOOLS AND TO 14P3-5-61, REPAIR THE SUIT. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH TWO INSTRUCTOR ASSISTS PERMITTED. (3 HRS)				
R852 CEMENT SEAMS OF ANTIEXPOSURE SUITS, SUCH AS BOOTS OF 16-P OR 21P SUITS	24%	26%	3.76	5.85
R881 PATCH ANTIEXPOSURE SUITS	19%	19%	3.62	5.56

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 15 (CONTINUED)

ITEMS FROM POI C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMERS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
-----				
II12E USING AN ACCESSORY KIT AND IN ACCORDANCE WITH APPLICABLE TECHNICAL PUBLICATIONS, INSPECT THE ACCESSORIES TO BE PACKED INTO THE KIT. THE PERFORMED STEPS WILL BE ACCOMPLISHED WITH ONE INSTRUCTOR ASSIST PERMITTED. (3 HRS)				
-----				
0747 INSPECT LIFE RAFT ACCESSORY SURVIVAL KITS	29%	28%	3.71	5.32
0750 INVENTORY LIFE RAFT ACCESSORY SURVIVAL KITS	25%	25%	3.21	4.82
-----				
III5C USING A PYROTECHNIC OPENING DEVICE, TEST FIXTURE AND IN ACCORDANCE WITH APPLICABLE TECHNICAL PUBLICATIONS, INSPECT THE OPENING DEVICE. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH SIX INSTRUCTOR ASSISTS PERMITTED. (7.5 HRS)				
-----				
X1159 TEST PYROTECHNICAL PARACHUTE RIPCORD RELEASE ACTUATORS	16%	17%	3.91	6.18
-----				
IV1E GIVEN AN AUTOMATIC BACK STYLE PARACHUTE, TOOLS, ACCESSORIES, AND IN ACCORDANCE WITH APPLICABLE TECHNICAL PUBLICATIONS; INSTALL THE ACCESSORIES. THREE INSTRUCTOR ASSISTS ARE PERMITTED. (4 HRS)				
-----				
K586 REPLACE PERSONNEL PARACHUTE SYSTEM EMERGENCY OXYGEN CYLINDERS	26%	28%	4.50	4.77

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 15 (CONTINUED)

ITEMS FROM POI C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMERS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
-----				
V1C USING AN MK/H7 RECOVERY PARACHUTE, AND I.A.W. APPLI- CABLE TECHNICAL PUBLICATIONS, INSPECT THE PARACHUTE ASSEMBLY. THREE INSTRUCTOR ASSISTS ARE PERMITTED. (2 HRS)				
-----				
L619 INSPECT PERSONNEL RECOVERY PARACHUTES	22%	22%	4.32	5.88
L616 DETERMINE REPAIRABILITY OF DAMAGED PERSONNEL RECOVERY PARACHUTES	18%	18%	2.44	5.58
-----				
V1D USING AN MK/7 RECOVERY PARACHUTE, TOOLS, AND I.A.W. APPLICABLE TECHNICAL PUBLICATIONS, PACK THE PARACHUTE ASSEMBLY. SIX INSTRUCTOR ASSISTS ARE PERMITTED. (18 HRS)				
-----				
L621 PACK PERSONNEL RECOVERY SYSTEM PARACHUTES	24%	24%	4.29	6.34
-----				
V3C USING AN ACES II RECOVERY PARACHUTE, AND I.A.W. APPLI- CABLE TECHNICAL PUBLICATIONS, INSPECT THE PARACHUTE ASSEMBLY. THREE INSTRUCTOR ASSISTS ARE PERMITTED. (1 HR)				
-----				
L619 INSPECT PERSONNEL RECOVERY PARACHUTES	22%	22%	4.32	5.88
L616 DETERMINE REPAIRABILITY OF DAMAGED PERSONNEL RECOVERY PARACHUTES	18%	18%	2.44	5.58

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00



TABLE 15 (CONTINUED)

ITEMS FROM POI C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMERS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
V3D USING AN ACES II RECOVERY PARACHUTE, TOOLS, AND I.A.W. APPLICABLE TECHNICAL PUBLICATIONS, PACK THE PARACHUTE ASSEMBLY. EIGHT INSTRUCTOR ASSISTS ARE PERMITTED. (18 HRS)				
L621 PACK PERSONNEL RECOVERY SYSTEM PARACHUTES	24%	24%	4.29	6.34
VIII A USING APPLICABLE TOOLS, MATERIAL AND SW-701, FABRICATE A TEMPLATE. FINISHED TEMPLATE MUST BE CONSTRUCTED ACCORDING TO LOCAL STANDARDS. ONE INSTRUCTOR ASSIST IS PERMITTED. (3 HRS)				
S930 DESIGN PATTERNS FOR AIRCRAFT FABRIC ITEMS	21%	22%	3.00	6.68
VIII B USING TEXTILE MATERIALS AND TOOLS, FABRICATE HAND SEWN SEAMS. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH FIVE INSTRUCTOR ASSISTS PERMITTED. (6 HRS)				
S978 SEW REPAIRS ON AIRCRAFT FABRIC ITEMS, SUCH AS LOOSE SEAMS, RIPS, SNAGS, OR TEARS	17%	18%	2.32	5.18
T1018 SEW AIRCRAFT INSULATION	20%	23%	3.35	5.95

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 15 (CONTINUED)

ITEMS FROM PO1 C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMERS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
-----				
VIII3C USING A DAMAGED PROTECTIVE COVER AND I.A.W. TECHNICAL PUBLICATIONS, INSPECT THE COVER. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH ONE INSTRUCTOR ASSIST PERMITTED. (1 HR)				
-----				
U1029 INSPECT PROTECTIVE COVERS FOR OTHER THAN TARGETS	4%	8%	1.56	5.02
U1023 DETERMINE REPAIRABILITY OF PROTECTIVE COVERS FOR OTHER THAN TARGETS	5%	9%	1.97	5.02
-----				
VIII3D USING A MEDIUM WEIGHT SEWING MACHINE, TOOLS, MATERIAL, A DAMAGED PROTECTIVE COVER AND I.A.W. TECHNICAL PUBLICATIONS, REPAIR THE DAMAGED AREA. TWO INSTRUCTOR ASSISTS ARE PERMITTED. (8 HRS)				
-----				
U1058 SEW LOOSE SEAMS OF PROTECTIVE COVERS FOR OTHER THAN TARGETS	9%	12%	1.62	4.63
-----				
VIII3G USING AN ITEM OF UPHOLSTERY AND I.A.W. LOCAL STANDARDS, INSPECT THE ITEM. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH ONE INSTRUCTOR ASSIST PERMITTED. (1 HR)				
-----				
T989 INSPECT AIRCRAFT UPHOLSTERY	15%	18%	2.59	4.70
S932 DETERMINE REPAIRABILITY OF AIRCRAFT FABRIC ITEMS OR UPHOLSTERY	25%	27%	2.85	5.52

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 15 (CONTINUED)

ITEMS FROM POI C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMERS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
-----				
VIII3H USING A MEDIUM WEIGHT SEWING MACHINE, TOOLS, MATERIAL, A DAMAGED ITEM OF UPHOLSTERY AND I.A.W. TECHNICAL PUB- LICATIONS, REPAIR THE DAMAGED AREAS. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH TWO INSTRUCTOR ASSISTS PERMITTED. (8 HRS)				
-----				
S964 REPAIR AIRCRAFT FABRIC ITEMS	22%	23%	3.00	5.15
S978 SEW REPAIRS ON AIRCRAFT FABRIC ITEMS, SUCH AS LOOSE SEAMS, RIPS, SNAGS, OR TEARS	17%	18%	2.32	5.18
-----				
VIII3K USING AN ITEM OF SOUNDPROOFING AND I.A.W. TECHNICAL PUBLICATIONS, INSPECT THE ITEM. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH ONE INSTRUCTOR ASSIST PERMITTED. (.5 HRS)				
-----				
T988 INSPECT AIRCRAFT SOUNDPROOFING	20%	24%	3.06	4.83
T986 DETERMINE REPAIRABILITY OF AIRCRAFT SOUNDPROOFING	21%	24%	3.21	5.03
-----				
VIII3L USING A DAMAGED ITEM OF SOUNDPROOFING, TOOLS, MATERIAL AND I.A.W. TECHNICAL PUBLICATIONS, REPAIR THE DAMAGED AREA. THE PERFORMED STEPS WILL BE IN CORRECT ORDER WITH ONE INSTRUCTOR ASSIST PERMITTED. (6.5 HRS)				
-----				
T994 PATCH AIRCRAFT INSULATION	17%	21%	2.62	5.18
T1018 SEW AIRCRAFT INSULATION	20%	23%	3.35	5.95

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 15 (CONTINUED)

ITEMS FROM PO1 C3ABR42733 WITH LESS THAN 30 PERCENT  
ALL FIRST-TERMS PERFORMING

ITEM/TASK	FIRST- JOB PERFORMING (N=232)	FIRST- ENLISTMENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
-----				
IX1A USING DAMAGED PERSONNEL PARACHUTE COMPONENTS, A CLASS 31 SEWING MACHINE AND TOOLS, REPAIR THE COMPONENTS. REPAIRS MADE MUST MEET REQUIRED TECHNICAL ORDER SPECI- FICATIONS. FIVE INSTRUCTOR ASSISTS WILL BE PERMITTED. (8 HRS)				
-----				
K525 PATCH PERSONNEL PARACHUTE SYSTEM CANOPIES	25%	28%	4.41	7.57
L622 PATCH PERSONNEL RECOVERY SYSTEM PARACHUTE CANOPIES	7%	9%	3.32	7.57
-----				
IX3A USING DAMAGED PERSONNEL PARACHUTE COMPONENTS, TOOLS, AND A CLASS III SEWING MACHINE, REPAIR THE PARACHUTE COMPONENTS. REPAIRS MADE MUST MEET TECHNICAL ORDER SPECIFICATIONS. SIX INSTRUCTOR ASSISTS WILL BE PER- MITTED. (4 HRS)				
-----				
M699 PATCH HOLES IN PARACHUTE SYSTEM DEPLOYMENT BAGS	26%	29%	3.59	5.01

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

for example, have over 30 percent of TAC and USAFE first-termers working on these systems. Other commands, such as SAC and MAC, work on them to such a limited extent that they lower the overall first-enlistment percent performing to under 30 percent. This area is, thus, not supported by survey data, according to regulation. Subject-matter experts need to examine those areas of the POI supported only by specific MAJCOMs. They need to consider having these MAJCOM-unique functions trained in the field directly by those major commands utilizing those particular functions.

As with the STS, another part of the POI analysis involves examining tasks not matched to any POI objectives. Based on percentages of first-termers performing them and high TE ratings, several tasks should be considered for inclusion in the POI. These tasks are performed by very high percentages of first-enlistment personnel, and also have high TE ratings. Table 16 lists examples of these tasks. Training specialists should review unreferenced tasks with more than 30 percent of AFSC 427X3 personnel performing them to determine if they should be included in common resident course training. A complete listing is contained in the Training Extract, which has been forwarded to the technical training school.

#### JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of each experience group provides some understanding of factors which may affect the job performance of AFSC 427X3 personnel. Job satisfaction indicators for TAFMS groups are shown in Table 17, along with those of a comparative sample of similar career ladders surveyed in 1986. This gives a relative measure of how the job satisfaction of personnel in AFSC 427X3 compares with other similar career ladders in the Air Force. Job satisfaction indicators from the previous survey were analyzed to examine any changes in job satisfaction over time. Finally, job satisfaction across specialty jobs was examined to determine how overall job satisfaction may be influenced by the specific job performed.

Five attitude questions covering job interest, perceived utilization of talents, perceived utilization of training, sense of accomplishment from the job, and reenlistment intentions provide indications of job satisfaction. By and large, AFSC 427X3 first-enlistment personnel had lower positive responses than first-termers in the comparative sample. Forty-eight percent of AFSC 427X3 first-enlistment personnel, for example, found their job interesting, compared to 64 percent of comparative sample first-termers (see Table 17). Only in their perceived use of training and reenlistment intentions were AFSC 427X3 first-termers higher. They felt their training prepared them well for their job, and most intended to reenlist. As experience increased, so did the positive responses. Second-enlistment (49-96 months) and career personnel (97+ months) had job satisfaction indicators closer to the comparative sample's indicators (see Table 17). While all AFSC 427X3 experience groups found their job less interesting than the comparative sample, as a whole, their overall job satisfaction indicators were slightly higher than the

TABLE 16

EXAMPLES OF TASKS NOT REFERENCED TO POI C3ABR42733  
WITH 30 PERCENT OR MORE FIRST-TERMERS PERFORMING

TASKS	1ST ENL PERCENT PERFORMING (N=423)	TRAINING EMPHASIS*	TASK DIFFICULTY**
K540 REMOVE PERSONNEL PARACHUTE SYSTEM CONNECTOR LINKS	55%	5.50	4.49
K582 REPLACE PERSONNEL PARACHUTE SYSTEM CONNECTOR LINKS	50%	5.18	5.00
P808 REMOVE DAMAGED HARDWARE ON LIFE PRESERVERS	53%	4.82	4.14
P813 REMOVE LIFE PRESERVER INFLATORS	62%	5.35	3.65
P815 REPLACE DAMAGED HARDWARE ON LIFE PRESERVERS	53%	5.03	4.12
P820 REPLACE LIFE PRESERVER INFLATORS	62%	5.59	4.19
P822 REPLACE MISSING HARDWARE ON LIFE PRESERVERS	54%	5.12	3.83
F256 MANUFACTURE TARPS	40%	3.50	4.73
H346 ASSEMBLE DECELERATION PARACHUTE SYSTEMS	32%	5.29	5.39
H352 INSTALL DECELERATION PARACHUTE SYSTEM CONTAINERS, SUCH AS PACKS	31%	4.38	4.41
K527 PERFORM TCIO MODIFICATION OF PERSONNEL PARACHUTES	33%	4.24	6.40
O752 PATCH HOLES IN LIFE RAFT CARRYING CASES	44%	4.29	4.63
P799 MODIFY LIFE PRESERVER CONTAINERS	45%	4.15	5.11
P821 REPLACE LIFE PRESERVER LANYARDS	40%	4.62	4.18
R925 SEW POCKETS ONTO INDIVIDUAL EQUIPMENT, SUCH AS SURVIVAL VESTS OR HARNESES	36%	3.74	5.37

\* Training Emphasis has an average of 2.07 and a standard deviation of 1.57

\*\* Task Difficulty has an average of 5.00 and a standard deviation of 1.00

TABLE 17

COMPARISON OF TAFMS GROUP JOB SATISFACTION INDICATORS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	AFSC 427X3 (N=423)	COMP SAMPLE** (N=3,924)	AFSC 427X3 (N=174)	COMP SAMPLE** (N=2,613)	AFSC 427X3 (N=266)	COMP SAMPLE** (N=3,573)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	48	64	60	62	65	72
SO-SO	30	21	23	23	23	16
DULL	22	15	16	15	10	11
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECTLY	61	71	71	71	81	80
LITTLE OR NOT AT ALL	39	28	28	28	18	20
<u>PERCEIVED USE OF TRAINING</u>						
FAIRLY WELL TO PERFECTLY	82	80	83	77	88	74
LITTLE OR NOT AT ALL	17	16	16	22	11	25
<u>SENSE OF ACCOMPLISHMENT FROM WORK</u>						
SATISFIED	61	64	67	61	75	67
NEUTRAL	19	16	16	16	11	11
DISSATISFIED	19	20	17	23	13	21
<u>REENLISTMENT INTENTIONS</u>						
WILL/PROBABLY WILL REENLIST	69	55	81	73	75	75
WILL NOT/PROBABLY WILL NOT	30	44	17	26	7	10
REENLIST						
WILL RETIRE	0	-	1	-	17	15

\* Numbers may not add up to 100 percent due to nonresponse and rounding

\*\* Comparative Sample includes AFSCs 304X4, 309X0, 361X0, 404X0, 411X0A, 411X1A, 431X0C, 431X0D, and 462X0

- Less than 1 percent

comparative sample. Only in the areas of perceived use of training and reenlistment intentions were the indicators consistently higher than the comparative sample's across experience groups.

Comparing indicators in the present survey to the previous one shows how responses to these job satisfaction questions have changed over time. Table 18 confirms that, since the last survey, the percentage of positive responses has increased for every experience group in every area. Areas showing major improvements include sense of accomplishment and reenlistment intentions for first-termers, job interest, and reenlistment intentions for second-enlistment personnel, and perceived use of talents and sense of accomplishment for career personnel (see Table 18).

Table 19 presents data from the job satisfaction indicators by specialty job. Most jobs had fairly low percentages of positive responses. Jobs consisting of senior personnel usually had the highest positive responses. These included Upholstery Personnel, Supervisory Personnel, and Instructors. This is consistent with the fact that job satisfaction indicators increased along with experience. Several jobs had very low positive responses. They included Deceleration and Drogue Parachute Personnel, Protective Covers Personnel, and Cargo Parachute Personnel. Protective Covers and Cargo Parachute Personnel are jobs different from typical career ladder duties. This may explain why they responded so negatively, especially in feeling their training was not being utilized properly. As a whole, most jobs had only moderately positive responses. The majority, however, were satisfied with their training and intended to reenlist.

#### WRITE-IN COMMENTS

In addition to answering background questions and rating tasks performed, survey respondents may also write in comments or add information at the end of either the inventory or one of the task factor booklets. These write-in comments often address several different issues, such as additional equipment or tasks or personal opinions about a subject. It is helpful to consider multiple comments on an issue to identify those of possible importance.

Several write-in comments dealt with the diversity of areas in which AFSC 427X3 personnel work. Many stated they were involved in several career ladder functions. This was especially true of personnel working in the smaller shops. This is consistent with the finding that most career ladder members work in the General Parachute and Fabrication Personnel job (see SPECIALTY JOBS section).

Another common write-in comment dealt with AFSC 427X3 personnel working in aerial delivery or cargo load augmentee duties. Much of this involves working with AFSC 605X1 Air Cargo Specialists. Many of these individuals worked in the APS/MAPS squadron. Another common augmentee duty was mobility.



TABLE 18

COMPARISON OF TAFMS GROUP JOB SATISFACTION INDICATORS  
(PERCENT MEMBERS RESPONDING)\*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1980 (N=357)	1987 (N=423)	1980 (N=147)	1987 (N=174)	1980 (N=368)	1987 (N=266)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	37	48	41	60	60	65
SO-SO	27	30	34	23	23	23
DULL	36	22	26	16	17	10
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	51 49	61 39	66 34	71 28	73 27	81 18
<u>PERCEIVED USE OF TRAINING</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	80 18	82 17	82 18	83 16	81 18	88 11
<u>SENSE OF ACCOMPLISHMENT FROM WORK</u>						
SATISFIED	46	61	56	67	64	75
NEUTRAL	21	19	15	16	13	11
DISSATISFIED	31	19	29	17	22	13
<u>REENLISTMENT INTENTIONS</u>						
WILL/PROBABLY WILL REENLIST	44	69	69	81	73	75
WILL NOT/PROBABLY WILL NOT REENLIST	56	30	30	18**	26	24**

\* Numbers may not add up to 100 percent due to nonresponse and rounding

\*\* Number includes those planning to retire

TABLE 19

JOB SATISFACTION INDICATORS BY SPECIALTY GROUP  
(PERCENT MEMBERS RESPONDING)\*

	GENERAL PARACHUTE AND FLOTATION PERSONNEL (N=467)	PROTECTIVE AND ORGANIZATIONAL CLOTHING PERSONNEL (N=15)	UPHOLSTERY PERSONNEL (N=5)	FLOTATION PERSONNEL (N=84)	PERSONNEL PARACHUTE PERSONNEL (N=56)
<u>EXPRESSED JOB INTEREST</u>					
INTERESTING	56	60	80	54	59
SO-SO	29	20	20	27	23
DULL	16	20	0	19	18
<u>PERCEIVED USE OF TALENTS</u>					
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	73 27	73 27	80 20	67 33	55 45
<u>PERCEIVED USE OF TRAINING</u>					
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	91 8	60 33	100 0	85 16	80 18
<u>SENSE OF ACCOMPLISHMENT FROM WORK</u>					
SATISFIED	66	80	80	67	68
NEUTRAL	16	0	0	18	13
DISSATISFIED	17	20	20	16	18
<u>REENLISTMENT INTENTIONS</u>					
WILL/PROBABLY WILL REENLIST	76	60	80	66	79
WILL NOT/PROBABLY WILL NOT REENLIST	20	40	0	32	20
WILL RETIRE	5	0	20	1	2

\* Numbers may not add up to 100 percent due to nonresponse and rounding

TABLE 19 (CONTINUED)

JOB SATISFACTION INDICATORS BY SPECIALTY GROUP  
(PERCENT MEMBERS RESPONDING)\*

	DECELERATION AND DROGUE PARACHUTE PERSONNEL (N=5)	SUPERVISORY PERSONNEL (N=76)	PROTECTIVE COVERS PERSONNEL (N=5)	REFURBISHMENT PERSONNEL (N=12)	INSTRUCTORS (N=5)	CARGO PARACHUTE PERSONNEL (N=32)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	20	76	20	58	100	28
SO-SO	40	13	40	8	0	31
DULL	20	7	40	33	0	41
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECTLY	40	86	60	75	100	38
LITTLE OR NOT AT ALL	40	13	40	25	0	63
<u>PERCEIVED USE OF TRAINING</u>						
FAIRLY WELL TO PERFECTLY	80	90	40	75	80	44
LITTLE OR NOT AT ALL	0	9	60	25	20	56
<u>SENSE OF ACCOMPLISHMENT FROM WORK</u>						
SATISFIED	60	80	40	75	80	38
NEUTRAL	0	9	20	8	0	34
DISSATISFIED	20	9	40	8	20	28
<u>REENLISTMENT INTENTIONS</u>						
WILL/PROBABLY WILL REENLIST	60	66	80	100	100	69
WILL NOT/PROBABLY WILL NOT REENLIST	20	12	20	0	0	25
WILL RETIRE	0	22	0	0	0	6

\* Numbers may not add up to 100 percent due to nonresponse and rounding

## IMPLICATIONS

As explained in the INTRODUCTION to this report, this survey was requested by USAFOMC/OMT to validate the STS and supporting training programs. Most AFSC 427X3 personnel perform a varied job encompassing most of the major duties in the career ladder. These primary duties include servicing flotation equipment, personnel parachute systems, and sewing. There were, however, several pockets of jobs where individuals were performing unique career ladder functions. These duties were often specific to a major command.

Job satisfaction is an area that should be looked at by functional managers to determine if there is a problem. While the indicators increased since the 1980 survey, they were still only slightly higher than the comparative sample's. Most career ladder members, however, were fairly satisfied with their training and intended to reenlist. Senior personnel tended to give the highest positive responses. The career ladder displayed normal career ladder progression, even though 7-skill level personnel still perform many technical functions. AFR 39-1 Specialty Job Descriptions appear to be descriptive of the career ladder as a whole. There may need to be more mention of other parachute systems and a more detailed description of 7-skill level technical functions in the Specialty Summary section.

A career ladder area needing close examination and review was the training documents. The Specialty Training Standard and Plan of Instruction were analyzed through a task matching provided by subject-matter experts at Chanute AFB Technical Training Center. Based on the results of the analysis, both documents were found to be very MAJCOM specific. While most career ladder members perform common basic tasks, such as working on flotation equipment, a number of other functions are primarily performed by only a few major commands. This has resulted in training documents tailored, not to the career ladder as a whole, but to the needs of the specific major commands performing those specific duties. Strictly following regulation, many items do not meet percent performing criteria (especially in the POI). When broken out by MAJCOM, however, most objectives meet the percent performing criteria in at least one major command. Subject-matter experts, thus, need to closely examine where their training emphasis lies. Should training be given only for general career ladder duties, or should duties be taught based on functions performed by specific major commands? Subject-matter experts should find this survey data useful in determining which direction needs to be taken in training personnel in the areas most needed to meet Air Force needs.

APPENDIX A  
SELECTED REPRESENTATIVE TASKS PERFORMED BY  
CAREER LADDER STRUCTURE GROUPS

TABLE A1

GENERAL PARACHUTE AND FLOTATION PERSONNEL  
(GRP073)

GROUP SIZE: 467

PERCENT OF SAMPLE: 54%

AVERAGE TICF: 69 MONTHS

AVERAGE TAFMS: 75 MONTHS

DAFSC: 42733 9%  
42753 72%  
42773 19%

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
P800 PACK LIFE PRESERVERS	98
P793 DEFLATE LIFE PRESERVERS	97
P803 PERFORM FUNCTIONAL TESTS OF LIFE PRESERVERS	97
P798 INSPECT LIFE PRESERVERS	97
P795 INFLATE LIFE PRESERVERS	96
P804 PERFORM LEAKAGE INSPECTION OF LIFE PRESERVERS	96
0746 INFLATE LIFE RAFTS	96
0743 DEFLATE LIFE RAFTS	96
F243 CUT STENCILS	96
P826 WEIGH LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	91
K522 INSPECT PERSONNEL PARACHUTES	87
0753 PATCH LIFE RAFTS	86
Z1184 CLEAN PARACHUTE PACKING TABLES	86
K524 PACK PERSONNEL PARACHUTES	86
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	85
Z1204 INSPECT SEWING MACHINES	85
E211 MAINTAIN AFTO FORMS 391 (PARACHUTE LOG)	84
P805 PERFORM OPERATIONAL CHECKS OF LIFE PRESERVER ORAL INFLATION VALVES	84
0788 VISUALLY INSPECT LIFE RAFT CO2 BOTTLES FOR SERVICEABILITY	84
Z1176 ADJUST SEWING MACHINES	82
E212 MAINTAIN AFTO FORMS 392 (PARACHUTE REPACK, INSPECTION, AND COMPONENT RECORD)	82
F278 PERFORM STENCILING OF DATA ONTO ITEMS, SUCH AS EQUIPMENT, CLOTHING, AND AIRCRAFT OR PARACHUTE COMPONENTS	77
F244 INSTALL HARDWARE ON TARPS	73
R921 SEW ITEMS, SUCH AS NAME TAGS, UNIT PATCHES, OR VELCRO TAPE ONTO ORGANIZATIONAL CLOTHING	73
K578 REPLACE PERSONNEL PARACHUTE SYSTEM CANOPIES	73
K514 ADJUST TENSION ON PERSONNEL PARACHUTE SYSTEM RIPCORDER RELEASE GRIPS OR HANDLES	73

TABLE A2

PROTECTIVE AND ORGANIZATIONAL CLOTHING PERSONNEL  
(GRP167)

GROUP SIZE: 15

PERCENT OF SAMPLE: 2%

AVERAGE TICF: 42 MONTHS

AVERAGE TAFMS: 48 MONTHS

DAFSC: 42733 27%  
42753 53%  
42773 20%

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
R921 SEW ITEMS, SUCH AS NAME TAGS, UNIT PATCHES, OR VELCRO TAPE ONTO ORGANIZATIONAL CLOTHING	100
P800 PACK LIFE PRESERVERS	100
P798 INSPECT LIFE PRESERVERS	100
P793 DEFLATE LIFE PRESERVERS	100
P795 INFLATE LIFE PRESERVERS	100
P804 PERFORM LEAKAGE INSPECTION OF LIFE PRESERVERS	100
Z1204 INSPECT SEWING MACHINES	100
R873 LUBRICATE ZIPPERS ON ANTIEXPOSURE SUITS	100
Z1250 TROUBLESHOOT MALFUNCTIONS ON SEWING MACHINES	100
H354 PACK DECELERATION PARACHUTES	93
H351 INSPECT DECELERATION PARACHUTES	93
Z1247 TIME SEWING MACHINES	93
P811 REMOVE LIFE PRESERVER CELLS	93
R924 SEW ORGANIZATIONAL CLOTHING	87
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	87
R867 INSPECT ANTIEXPOSURE SUITS	87
Z1176 ADJUST SEWING MACHINES	87
P794 DETERMINE REPAIRABILITY OF DAMAGED LIFE PRESERVERS	87
F248 MANUFACTURE FOREIGN OBJECT DAMAGE (FOD) BAGS	87
H347 DETERMINE REPAIRABILITY OF DAMAGED DECELERATION PARACHUTES	87
P819 REPLACE LIFE PRESERVER CONTAINERS	87
P812 REMOVE LIFE PRESERVER CONTAINERS	87
P815 REPLACE DAMAGED HARDWARE ON LIFE PRESERVERS	87
P820 REPLACE LIFE PRESERVER INFLATORS	87
R922 SEW ITEMS, SUCH AS NAME TAGS, UNIT PATCHES, OR VELCRO TAPE ONTO PROTECTIVE CLOTHING	80
E205 MAINTAIN AFTO FORMS 336 (LIFE PRESERVER INSPECTION RECORD)	80
R860 DETERMINE REPAIRABILITY OF ORGANIZATIONAL CLOTHING	80

TABLE A3  
UPHOLSTERY PERSONNEL  
(GRP176)

GROUP SIZE: 5	PERCENT OF SAMPLE: LESS THAN 1%
AVERAGE TICF: 118 MONTHS	AVERAGE TAFMS: 120 MONTHS
DAFSC: 42733      0%	
42753      60%	
42773      40%	

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
T990 MANUFACTURE AIRCRAFT COVERS, SUCH AS SEAT, HEADREST, OR ARMREST COVERS	100
T1010 REPLACE AIRCRAFT CARPETING	100
T1011 REPLACE AIRCRAFT COVERS, SUCH AS SEAT, HEADREST, OR ARMREST COVERS	100
S929 CUT FABRIC FOR AIRCRAFT FABRIC ITEMS	100
S933 INSPECT AIRCRAFT FABRIC ITEMS	100
T1001 REMOVE AIRCRAFT COVERS, SUCH AS SEAT, HEADREST, OR ARMREST COVERS	100
S930 DESIGN PATTERNS FOR AIRCRAFT FABRIC ITEMS	100
T989 INSPECT AIRCRAFT UPHOLSTERY	100
T982 CUT FOAM RUBBER FOR AIRCRAFT SEAT CUSHIONS	100
R921 SEW ITEMS, SUCH AS NAME TAGS, UNIT PATCHES, OR VELCRO TAPE ONTO ORGANIZATIONAL CLOTHING	100
S931 DESIGN PROTOTYPES OF AIRCRAFT FABRIC ITEMS	100
Z1193 DISCONNECT ELECTRICAL POWER SOURCE, SUCH AS CORDS OR PLUGS	100
Z1218 LUBRICATE SEWING MACHINES	100
Z1183 CLEAN FACILITIES	100
Z1176 ADJUST SEWING MACHINES	100
Z1187 CLEAN SEWING MACHINES	100
T1003 REMOVE AIRCRAFT HEADLINERS	100
T1012 REPLACE AIRCRAFT HEADLINERS	100
Z1204 INSPECT SEWING MACHINES	100
F297 REUPHOLSTER FURNITURE, SUCH AS DAYROOM OR OFFICE FURNITURE	100
Z1245 SHARPEN HAND TOOLS	100
F247 MANUFACTURE DRAPES FOR OFFICES	100
F245 LAY CARPET IN BASE FACILITIES, SUCH AS IN DAYROOMS OR OFFICES	100
F298 REUPHOLSTER VEHICLE SEATS	100
Z1250 TROUBLESHOOT MALFUNCTIONS ON SEWING MACHINES	100



TABLE A4  
FLOTATION PERSONNEL  
(GRP064)

GROUP SIZE: 84

PERCENT OF SAMPLE: 10%

AVERAGE TICF: 26 MONTHS

AVERAGE TAFMS: 39 MONTHS

DAFSC: 42733 32%  
42753 63%  
42773 5%

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
P795 INFLATE LIFE PRESERVERS	98
P800 PACK LIFE PRESERVERS	96
P798 INSPECT LIFE PRESERVERS	95
P793 DEFLATE LIFE PRESERVERS	94
P804 PERFORM LEAKAGE INSPECTION OF LIFE PRESERVERS	92
P803 PERFORM FUNCTIONAL TESTS OF LIFE PRESERVERS	88
P810 REMOVE LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	87
P817 REPLACE LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	87
0746 INFLATE LIFE RAFTS	87
0743 DEFLATE LIFE RAFTS	86
P794 DETERMINE REPAIRABILITY OF DAMAGED LIFE PRESERVERS	85
P825 VISUALLY INSPECT LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES FOR SERVICEABILITY	82
0744 DETERMINE CORRECTED PRESSURES FOR LIFE RAFTS	81
P811 REMOVE LIFE PRESERVER CELLS	81
F243 CUT STENCILS	81
P826 WEIGH LIFE PRESERVER CARBON DIOXIDE (CO2) CARTRIDGES	80
0739 APPLY TALCUM POWDER TO LIFE RAFTS	80
0758 PERFORM LEAKAGE INSPECTION OF LIFE RAFTS	77
P818 REPLACE LIFE PRESERVER CELLS	77
P813 REMOVE LIFE PRESERVER INFLATORS	75
0789 VISUALLY INSPECT LIFE RAFTS	74
0791 WEIGH LIFE RAFT CO2 BOTTLES	71
P812 REMOVE LIFE PRESERVER CONTAINERS	71
P820 REPLACE LIFE PRESERVER INFLATORS	70
P819 REPLACE LIFE PRESERVER CONTAINERS	70
0769 REMOVE LIFE RAFT CO2 CYLINDERS	69
P801 PATCH LIFE PRESERVER CELLS	68
0778 REPLACE LIFE RAFT CO2 CYLINDERS	67
P805 PERFORM OPERATIONAL CHECKS OF LIFE PRESERVER ORAL INFLATION VALVES	65
0745 DETERMINE REPAIRABILITY OF DAMAGED LIFE RAFTS	65

TABLE A5  
PERSONNEL PARACHUTE PERSONNEL  
(GRP054)

GROUP SIZE: 56	PERCENT OF SAMPLE: 6%
AVERAGE TICF: 43 MONTHS	AVERAGE TAFMS: 46 MONTHS
DAFSC: 42733      29%	
42753      64%	
42773      7%	

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
K522 INSPECT PERSONNEL PARACHUTES	100
K524 PACK PERSONNEL PARACHUTES	96
K520 INSPECT PERSONNEL PARACHUTE SYSTEM AUTOMATIC RIPC RELEASES	95
K516 DETERMINE REPAIRABILITY OF DAMAGED PERSONNEL PARACHUTES	91
K517 DISASSEMBLE PERSONNEL PARACHUTE SYSTEMS	91
K554 REMOVE PERSONNEL PARACHUTE SYSTEM MANUAL RIPC CORDS	91
F243 CUT STENCILS	91
K515 ASSEMBLE PERSONNEL PARACHUTE SYSTEMS	89
K562 REMOVE PERSONNEL PARACHUTE SYSTEM RISERS	89
K541 REMOVE PERSONNEL PARACHUTE SYSTEM CONTAINERS, SUCH AS PACKS	89
K558 REMOVE PERSONNEL PARACHUTE SYSTEM PILOT CHUTES	89
K540 REMOVE PERSONNEL PARACHUTE SYSTEM CONNECTOR LINKS	89
K582 REPLACE PERSONNEL PARACHUTE SYSTEM CONNECTOR LINKS	88
K596 REPLACE PERSONNEL PARACHUTE SYSTEM MANUAL RIPC CORDS	88
K526 PERFORM FUNCTIONAL TESTS OF PERSONNEL PARACHUTE SYSTEM CANOPY RELEASES	86
K590 REPLACE PERSONNEL PARACHUTE SYSTEM HARNESSSES	86
K514 ADJUST TENSION ON PERSONNEL PARACHUTE SYSTEM RIPC CORD RELEASE GRIPS OR HANDLES	86
K585 REPLACE PERSONNEL PARACHUTE SYSTEM EJECTOR SNAPS	86
K600 REPLACE PERSONNEL PARACHUTE SYSTEM PILOT CHUTES	86
E211 MAINTAIN AFTO FORMS 391 (PARACHUTE LOG)	84
K555 REMOVE PERSONNEL PARACHUTE SYSTEM MECHANICAL AUTOMATIC OPENING DEVICES	84
K543 REMOVE PERSONNEL PARACHUTE SYSTEM EJECTOR SNAPS	84
E213 MAINTAIN AFTO FORMS 393 (AUTOMATIC RIPC CORD RELEASE LOG)	82
K548 REMOVE PERSONNEL PARACHUTE SYSTEM HARNESSSES	82
K536 REMOVE PERSONNEL PARACHUTE SYSTEM CANOPIES	82
K556 REMOVE PERSONNEL PARACHUTE SYSTEM PACK LOCKING LOOPS	80
K578 REPLACE PERSONNEL PARACHUTE SYSTEM CANOPIES	80

TABLE A6

DECELERATION AND DROGUE PARACHUTE PERSONNEL  
(GRP145)

GROUP SIZE:	5	PERCENT OF SAMPLE:	LESS THAN 1%
AVERAGE TICF:	42 MONTHS	AVERAGE TAFMS:	46 MONTHS
DAFSC:	42733	20%	
	42753	60%	
	42773	20%	

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
H351 INSPECT DECELERATION PARACHUTES	100
H354 PACK DECELERATION PARACHUTES	100
H346 ASSEMBLE DECELERATION PARACHUTE SYSTEMS	100
I403 INSPECT DROGUE PARACHUTES	100
H389 REPLACE DECELERATION PARACHUTE SYSTEM PILOT CHUTES	100
H360 REMOVE DECELERATION PARACHUTE SYSTEM BUFFER STRIPS	100
I399 ASSEMBLE DROGUE PARACHUTE SYSTEMS	100
I405 PACK DROGUE PARACHUTES	100
K524 PACK PERSONNEL PARACHUTES	100
I426 REPLACE DROGUE PARACHUTE SYSTEM CANOPIES	100
H355 PATCH DECELERATION PARACHUTE SYSTEM CANOPIES	100
H394 REPLACE DECELERATION PARACHUTE SYSTEM SUSPENSION LINES	100
K515 ASSEMBLE PERSONNEL PARACHUTE SYSTEMS	100
H370 REMOVE DECELERATION PARACHUTE SYSTEM PILOT CHUTES	80
M696 HANG PARACHUTES	80
H373 REMOVE DECELERATION PARACHUTE SYSTEM RISERS	80
K522 INSPECT PERSONNEL PARACHUTES	80
I400 DETERMINE REPAIRABILITY OF DAMAGED DROGUE PARACHUTES	80
I401 DISASSEMBLE DROGUE PARACHUTE SYSTEMS	80
I438 REPLACE DROGUE PARACHUTE SYSTEM WITHDRAWAL LINES	80
H382 REPLACE DECELERATION PARACHUTE SYSTEM CANOPIES	80
H380 REPLACE DECELERATION PARACHUTE SYSTEM BUFFER STRIPS	80
E190 ANNOTATE DD FORMS 1577 (UNSERVICEABLE (CONDEMNED) TAG MATERIEL)	80
I423 REMOVE DROGUE PARACHUTE SYSTEM WITHDRAWAL LINES	80
H379 REPLACE DECELERATION PARACHUTE SYSTEM BRIDLE LINES	80
E211 MAINTAIN AFTO FORMS 391 (PARACHUTE LOG)	80
H359 REMOVE DECELERATION PARACHUTE SYSTEM BRIDLE LINES	80
H349 DISASSEMBLE DECELERATION PARACHUTE SYSTEMS	80
K527 PERFORM TCTO MODIFICATIONS OF PERSONNEL PARACHUTES	80
K536 REMOVE PERSONNEL PARACHUTE SYSTEM CANOPIES	80
F243 CUT STENCILS	80

TABLE A7  
SUPERVISORY PERSONNEL  
(GRP049)

GROUP SIZE: 76	PERCENT OF SAMPLE: 9%
AVERAGE TICF: 176 MONTHS	AVERAGE TAFMS: 188 MONTHS
DAFSC: 42733      0%	
42753      17%	
42773      83%	

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B49 COUNSEL SUBORDINATES ON MILITARY-RELATED PROBLEMS	99
B50 COUNSEL SUBORDINATES ON PERSONAL-RELATED PROBLEMS	97
C140 WRITE APR	95
C121 INSPECT COMPLETED WORK	91
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	91
A5 COORDINATE WORK ACTIVITIES WITH OTHER UNITS	89
C125 INSPECT PERSONNEL	88
B80 ORIENT NEWLY ASSIGNED PERSONNEL	88
A29 ESTABLISH WORK PRIORITIES	87
D161 MAINTAIN AF FORMS 623 (ON-THE-JOB TRAINING RECORD)	86
B77 INTERPRET POLICIES FOR SUBORDINATES	86
A43 SCHEDULE LEAVES	86
A6 COORDINATE WORK ACTIVITIES WITH SHOP SECTIONS	84
C92 CERTIFY PROFICIENCY OF SUBORDINATES	82
C118 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	82
B78 INTERPRET PROCEDURES FOR SUBORDINATES	82
E190 ANNOTATE DD FORMS 1577 (UNSERVICEABLE (CONDEMNED) TAG MATERIEL))	82
A4 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	82
D165 REVIEW TRAINING PROGRESS OF INDIVIDUALS	80
E184 ANNOTATE DD FORMS 1574 (SERVICEABLE TAG-MATERIEL)	80
B76 INTERPRET DIRECTIVES FOR SUBORDINATES	79
A27 ESTABLISH SUPPLY REQUIREMENTS	79
C124 INSPECT LOCALLY REPAIRED ITEMS	78
A2 ASSIGN SPACE FOR INCOMING EQUIPMENT	78
B85 SUPERVISE FABRICATION AND PARACHUTE SPECIALISTS (AFSC 42753)	76
B81 PARTICIPATE IN STAFF MEETINGS	76
A24 ESTABLISH SHOP PERFORMANCE STANDARDS	76
C134 PERFORM IN-PROGRESS INSPECTIONS	75
B72 IMPLEMENT SAFETY PROCEDURES	75
C123 INSPECT LOCALLY MANUFACTURED ITEMS	74

TABLE A8  
PROTECTIVE COVERS PERSONNEL  
(GRP144)

GROUP SIZE: 5	PERCENT OF SAMPLE: LESS THAN 1%
AVERAGE TICF: 81 MONTHS	AVERAGE TAFMS: 85 MONTHS
DAFSC: 42733      20%	
42753      60%	
42773      20%	

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
U1026 FABRICATE PROTECTIVE COVERS FOR OTHER THAN TARGETS	100
F300 SEW TARPS	100
F291 REPAIR TARPS	100
U1035 LAY OUT PROTECTIVE COVER PATTERNS FOR OTHER THAN TARGETS	100
Z1183 CLEAN FACILITIES	100
Z1187 CLEAN SEWING MACHINES	100
Y1167 REPLACE DAMAGED FABRIC ON MOBILE SITE EQUIPMENT, SUCH AS PORTABLE SHOWERS OR FOLDING CHAIRS	100
Z1250 TROUBLESHOOT MALFUNCTIONS ON SEWING MACHINES	100
C123 INSPECT LOCALLY MANUFACTURED ITEMS	100
Z1247 TIME SEWING MACHINES	100
C124 INSPECT LOCALLY REPAIRED ITEMS	100
Z1218 LUBRICATE SEWING MACHINES	100
Z1178 ASSEMBLE SEWING MACHINE ACCESSORIES	100
F243 CUT STENCILS	100
F256 MANUFACTURE TARPS	80
R921 SEW ITEMS, SUCH AS NAME TAGS, UNIT PATCHES, OR VELCRO TAPE ONTO ORGANIZATIONAL CLOTHING	80
F273 PATCH TARPS	80
F269 MODIFY TARPS	80
U1029 INSPECT PROTECTIVE COVERS FOR OTHER THAN TARGETS	80
U1058 SEW LOOSE SEAMS OF PROTECTIVE COVERS FOR OTHER THAN TARGETS	80
U1052 REPLACE PROTECTIVE COVER HARDWARE FOR OTHER THAN TARGETS	80
U1050 REPLACE DAMAGED SECTIONS OF PROTECTIVE COVERS FOR OTHER THAN TARGETS	80
F244 INSTALL HARDWARE ON TARPS	80
U1046 REMOVE PROTECTIVE COVER HARDWARE FOR OTHER THAN TARGETS	80
Z1204 INSPECT SEWING MACHINES	80
C121 INSPECT COMPLETED WORK	80
U1055 SELECT PROTECTIVE COVER MATERIALS FOR OTHER THAN TARGETS	80
Z1176 ADJUST SEWING MACHINES	80

TABLE A9  
REFURBISHMENT PERSONNEL  
(GRP113)

GROUP SIZE: 12

PERCENT OF SAMPLE: 1%

AVERAGE TICF: 63 MONTHS

AVERAGE TAFMS: 64 MONTHS

DAFSC: 42733 0%  
42753 75%  
42773 25%

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
T1013 REPLACE AIRCRAFT LINOLEUM	100
T1018 SEW AIRCRAFT INSULATION	100
T987 FABRICATE AIRCRAFT BLANKET INSULATION	100
T990 MANUFACTURE AIRCRAFT COVERS, SUCH AS SEAT, HEADREST, OR ARMREST COVERS	100
S929 CUT FABRIC FOR AIRCRAFT FABRIC ITEMS	100
S935 MANUFACTURE AIRCRAFT BLOW OUT PATCHES	100
S937 MANUFACTURE AIRCRAFT FABRIC ITEM BUNK COVERS	100
S965 REPLACE AIRCRAFT BLOW OUT PATCHES	92
T983 CUT INSULATING MATERIAL FOR AIRCRAFT SOUNDPROOFING	92
T1016 REPLACE VELCRO STRIPS ON AIRCRAFT UPHOLSTERY	92
T1011 REPLACE AIRCRAFT COVERS, SUCH AS SEAT, HEADREST, OR ARMREST COVERS	92
Z1218 LUBRICATE SEWING MACHINES	92
T986 DETERMINE REPAIRABILITY OF AIRCRAFT SOUNDPROOFING	92
S932 DETERMINE REPAIRABILITY OF AIRCRAFT FABRIC ITEMS OR UPHOLSTERY	92
S964 REPAIR AIRCRAFT FABRIC ITEMS	92
F248 MANUFACTURE FOREIGN OBJECT DAMAGE (FOD) BAGS	92
T1009 REPLACE AIRCRAFT BLANKET INSULATION	83
S933 INSPECT AIRCRAFT FABRIC ITEMS	83
T1014 REPLACE AIRCRAFT SOUNDPROOFING HARDWARE	83
T1015 REPLACE VELCRO STRIPS ON AIRCRAFT SOUNDPROOFING	83
Z1187 CLEAN SEWING MACHINES	83
S972 REPLACE PEDAL DOOR PATCHES	83
T994 PATCH AIRCRAFT INSULATION	83
T988 INSPECT AIRCRAFT SOUNDPROOFING	83
Z1204 INSPECT SEWING MACHINES	83
S930 DESIGN PATTERNS FOR AIRCRAFT FABRIC ITEMS	83
T989 INSPECT AIRCRAFT UPHOLSTERY	83
T981 CUT FOAM RUBBER FOR AIRCRAFT MATTRESSES	83
T985 DESIGN PATTERNS FOR AIRCRAFT BLANKET INSULATION	83

## TABLE A10

INSTRUCTORS  
(GRP065)

GROUP SIZE: 5

PERCENT OF SAMPLE: LESS THAN 1%

AVERAGE TICF: 114 MONTHS

AVERAGE TAFMS: 116 MONTHS

DAFSC: 42733 0%  
42753 80%  
42773 20%

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
Z1176 ADJUST SEWING MACHINES	100
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	100
Z1247 TIME SEWING MACHINES	100
Z1187 CLEAN SEWING MACHINES	100
Z1204 INSPECT SEWING MACHINES	80
Z1218 LUBRICATE SEWING MACHINES	80
D143 ADMINISTER TESTS	80
D169 SCORE TESTS SUCH AS ORAL, WRITTEN, OR PERFORMANCE TESTS	80
C121 INSPECT COMPLETED WORK	60
C92 CERTIFY PROFICIENCY OF SUBRODINATES	60
Z1234 REMOVE COMPONENTS OF SEWING MACHINE HEADS	60
B72 IMPLEMENT SAFETY PROCEDURES	60
B49 COUNSEL SUBORDINATES ON MILITARY-RELATED PROBLEMS	60
B50 COUNSEL SUBORDINATES ON PERSONAL-RELATED PROBLEMS	60
D149 CONDUCT RESIDENT TECHNICAL TRAINING	40
Z1250 TROUBLESHOOT MALFUNCTIONS ON SEWING MACHINES	40
D151 DEVELOP COURSE CURRICULA MATERIALS	40
C125 INSPECT PERSONNEL	40
Z1228 PERFORM PREVENTIVE MAINTENANCE ON SEWING MACHINE TABLES	40
D171 UPDATE COURSE CURRICULA MATERIALS	40
Z1211 INSTALL COMPONENTS ON SEWING MACHINE HEADS	40
Z1193 DISCONNECT ELECTRICAL POWER SOURCE, SUCH AS CORDS OR PLUGS	40
A5 COORDINATE WORK ACTIVITIES WITH OTHER UNITS	40
Z1178 ASSEMBLE SEWING MACHINE ACCESSORIES	40
Z1191 DISASSEMBLE SEWING MACHINE ACCESSORIES	40
B73 IMPLEMENT SECURITY PROCEDURES	40
D156 EVALUATE TRAINING MATERIALS	40

TABLE A11

CARGO PARACHUTE PERSONNEL  
(GRP117)GROUP SIZE: 32  
AVERAGE TICF: 46 MONTHSPERCENT OF SAMPLE: 4%  
AVERAGE TAFMS: 49 MONTHSDAFSC: 42733 10%  
42753 81%  
42773 9%

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
G305 INSPECT CARGO TYPE PARACHUTES	100
G302 DETERMINE REPAIRABILITY OF DAMAGED CARGO TYPE PARACHUTES	100
G309 PATCH CARGO PARACHUTE SYSTEM CANOPIES	97
G301 ASSEMBLE CARGO PARACHUTE SYSTEMS	97
G331 REPLACE CARGO PARACHUTE SYSTEM CONNECTOR LINKS	97
G308 PACK CARGO PARACHUTES	94
G303 DISASSEMBLE CARGO PARACHUTE SYSTEMS	94
G344 SPLICE CARGO PARACHUTE SYSTEM BROKEN SUSPENSION LINES	94
G306 MANUFACTURE CARGO PARACHUTE SYSTEM EXPANDED AIR DROP TRAINING BUNDLES	91
Z1187 CLEAN SEWING MACHINES	91
G325 REMOVE CARGO PARACHUTE SYSTEM SUSPENSION LINES	91
G316 REMOVE CARGO PARACHUTE SYSTEM CONNECTOR LINKS	91
G343 RETRIEVE CARGO PARACHUTES AT OFF STATION DROP ZONES	88
G337 REPLACE CARGO PARACHUTE SYSTEM REEFING LINES	88
G335 REPLACE CARGO PARACHUTE SYSTEM PILOT CHUTES	88
G320 REMOVE CARGO PARACHUTE SYSTEM PILOT CHUTES	84
G304 FABRICATE CARGO PARACHUTE SYSTEM COMPONENTS	81
G318 REMOVE CARGO PARACHUTE SYSTEM EXTRACTION LINES	81
G322 REMOVE CARGO PARACHUTE SYSTEM REEFING LINES	81
G334 REPLACE CARGO PARACHUTE SYSTEM FASTENER HARDWARE, SUCH AS ZIPPERS OR GROMMETS	81
Z1204 INSPECT SEWING MACHINES	78
G340 REPLACE CARGO PARACHUTE SYSTEM SUSPENSION LINES	75
Z1250 TROUBLESHOOT MALFUNCTIONS ON SEWING MACHINES	75
Z1176 ADJUST SEWING MACHINES	75
Z1247 TIME SEWING MACHINES	75
Z1218 LUBRICATE SEWING MACHINES	72
G342 RESEQUENCE CARGO PARACHUTE SYSTEM SUSPENSION LINES	69
Z1222 PERFORM OPERATOR MAINTENANCE ON SEWING MACHINES, SUCH AS CHANGING NEEDLES, LAMPS, OR PRESSURE FEET	69
G319 REMOVE CARGO PARACHUTE SYSTEM FASTENER HARDWARE, SUCH AS ZIPPERS OR GROMMETS	69



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